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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY,
(INCORPORATED.)

VOL. XIV.

CHICAGO, ILLINOIS, AUGUST 15, 1895.

No. 2.

{ ONE DOLLAR PER ANNUM.
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EXCELSIOR Dustless Warehouse and Elevator Separator,
EXCELSIOR Oat Clipper, EXCELSIOR Separator and Grader,
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Scales, Flexible Loading Spouts.
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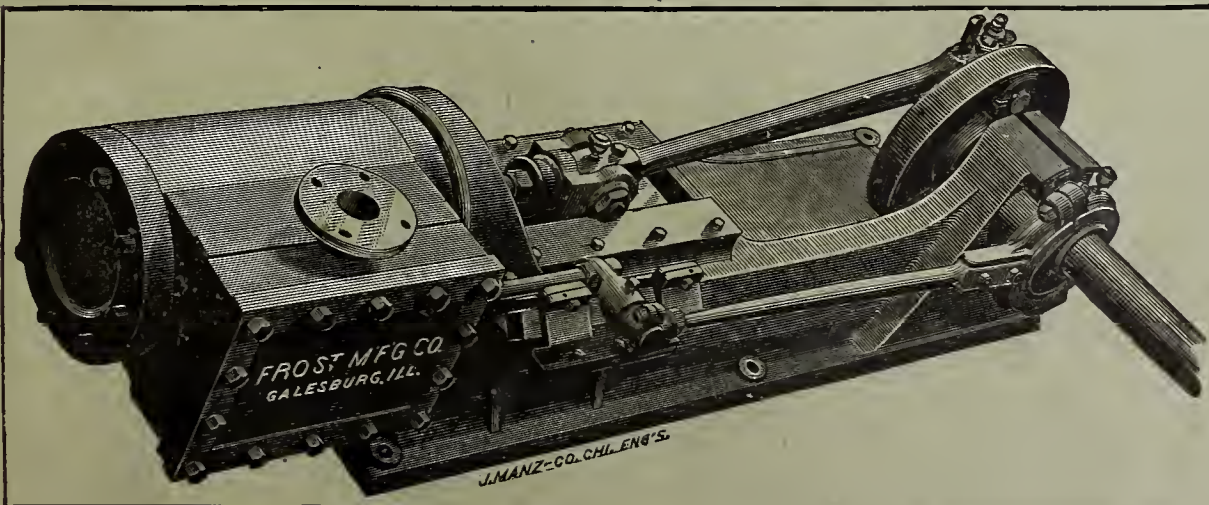
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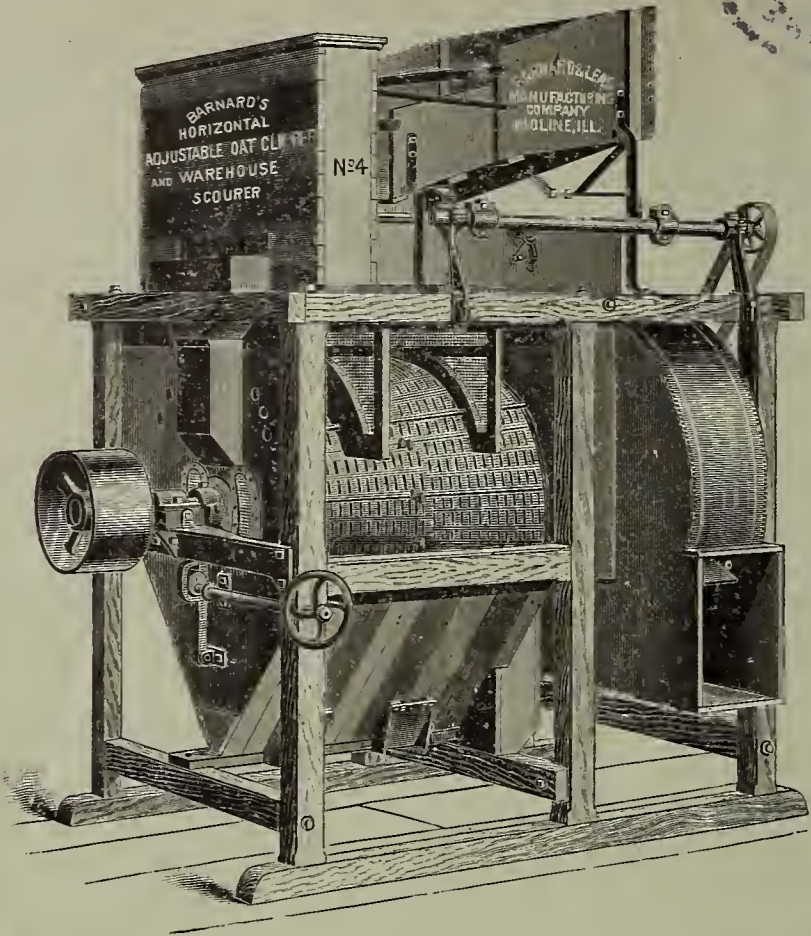
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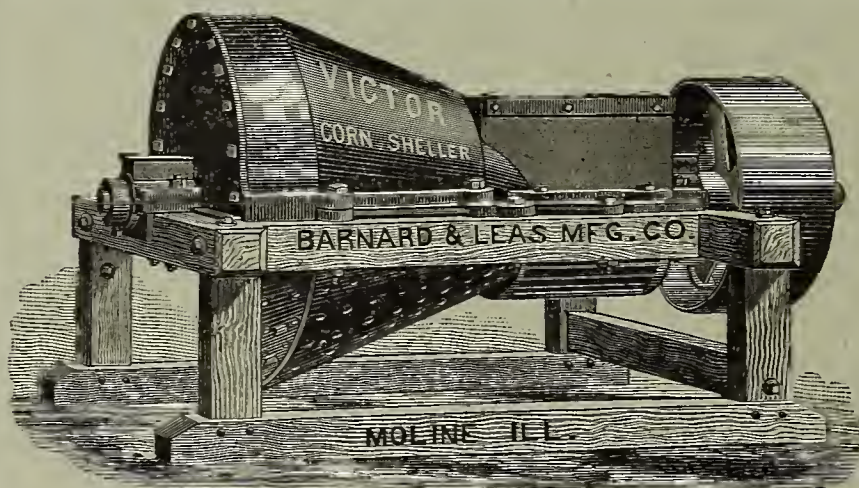
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The best outfit for shelling
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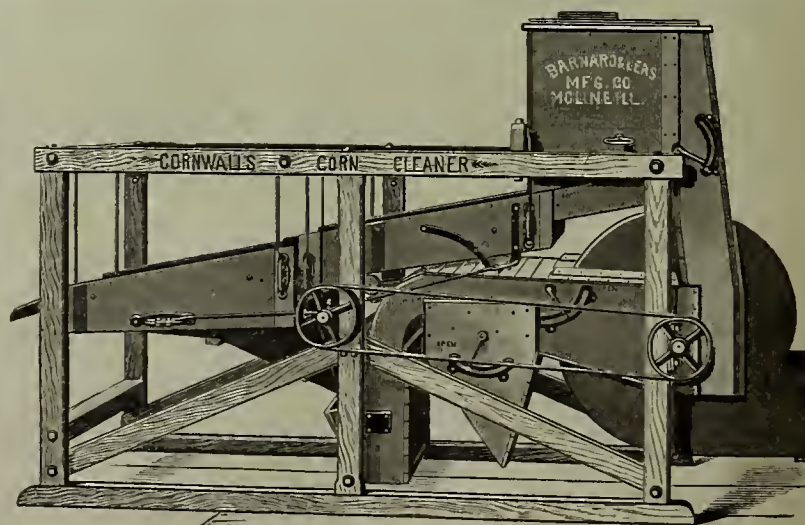
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Our claim of *perfect satisfaction* is substantiated by the following letter relative to our
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CAPITAL & SURPLUS,
\$ 100,000.

Minneapolis. Minn. May 23 1895

The S. Howes Co

Silver Creek N. Y.

Gentlemen

*We have had in our Elevator here
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Separators for the last five years, and
can truly say that they give entire satisfaction
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We know of no other separator that can take
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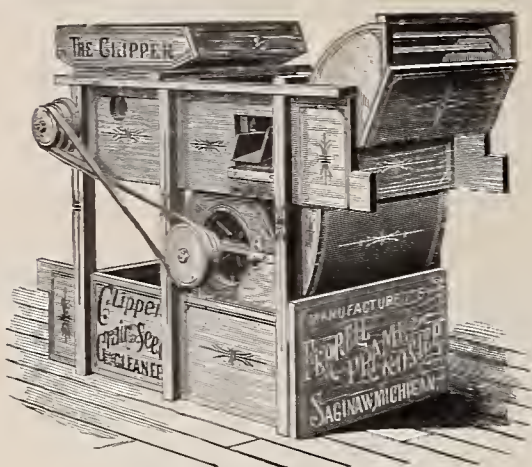
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We guarantee them to do you the best of work, and would like to correspond with you.

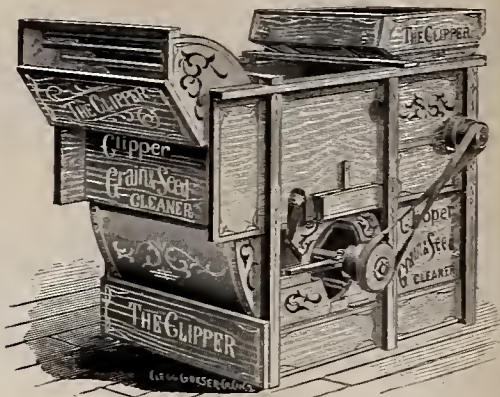
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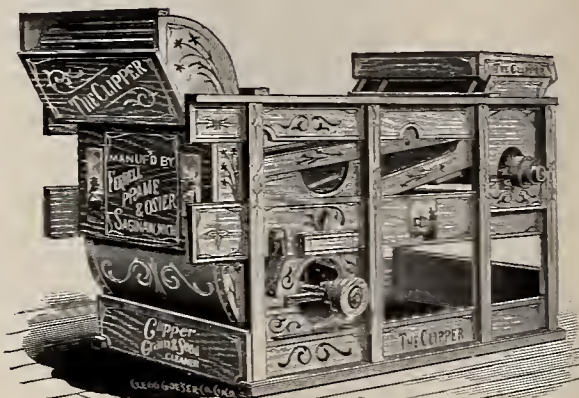
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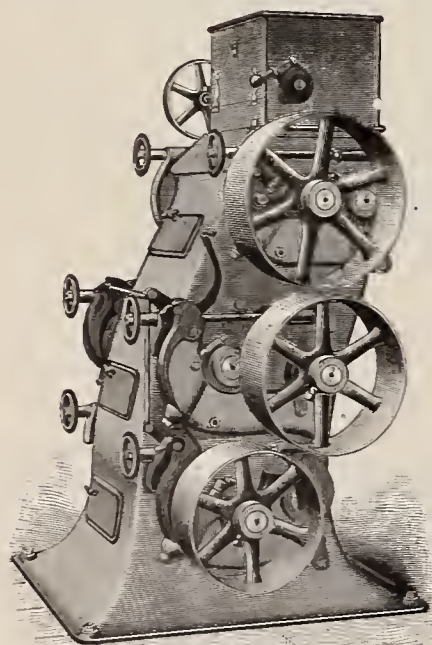
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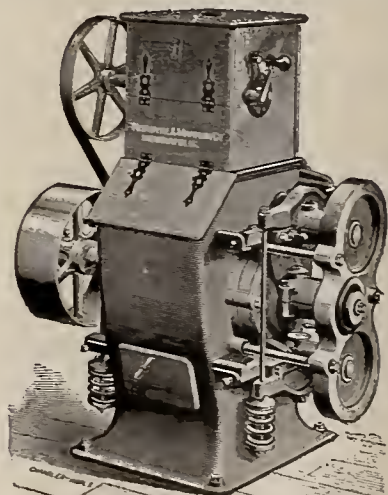
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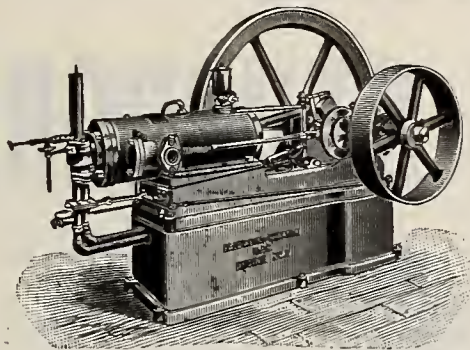
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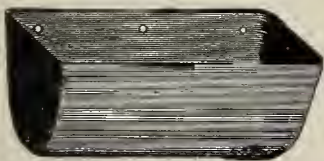
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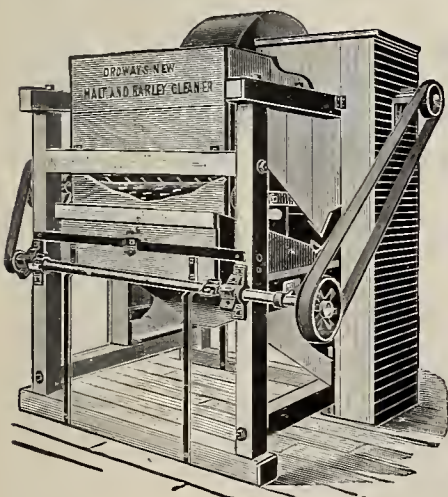


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2 TO 75 ACTUAL HORSE POWER.

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Barley and Malt Cleaner,
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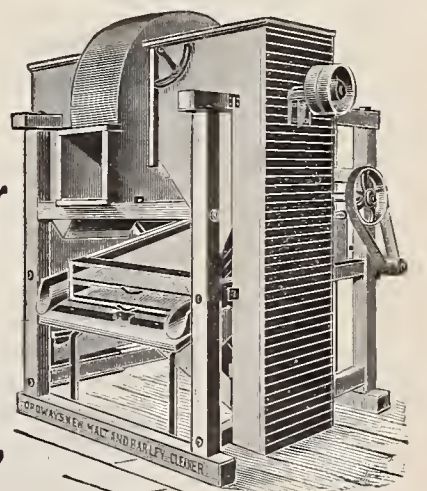
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Messrs. A. F. ORDWAY & SONS,
Beaver Dam, Wis.

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breaking of the kernels in the least. With
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into the merits of all barley machines, and
we find we made no mistake in selecting
yours, as it is the best thing we have ever
seen or used. Respectfully yours,
BISSMAN & SONS.

FRONT AND BACK VIEWS.

This is the most perfect combined machine made
for cleaning and polishing barley and degermi
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house and elevator use. Cheapest and best
thing out.

A. F. ORDWAY & SONS,
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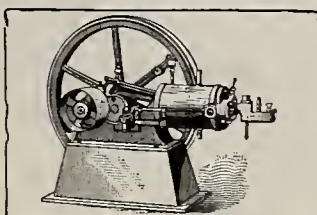
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The Monitor Grain Cleaners.

A RECORD TO BE PROUD OF.

During the last five years all of the leading Cleaning Elevators built in the United States, with but two exceptions, adopted the Monitor Separators.

The Monitors, having been selected in the face of the closest, keenest kind of competition, surely demonstrates the superiority of the machine.

FACTS ARE STUBBORN THINGS.

Shrewd handlers of grain cannot afford to use an inferior machine for cleaning. The margins are too limited to admit of any wastage, or to run the risk of "missing grade."

Investigation has proven that there is not a grain separator offered to-day that so thoroughly meets the requirements of grain men as the Monitor.

If such were not the case we would not be in a position to refer to most all of the leading cleaning elevators in the United States.

COMMENT IS UNNECESSARY.

THE MONITOR MALT CLEANER

Is the only satisfactory machine offered for thoroughly cleaning malt.

The "MONITOR" will remove all sprouts, dust and foreign matters, polish up the malt, and, while improving its looks, enhances its value. *It will not injure the most tender malt.* Light running, easily placed, requiring but little care or attention, it is a machine that should be in every malt house and brewery.

Has already been adopted and advocated by many of the leading maltsters and brewers in this country.

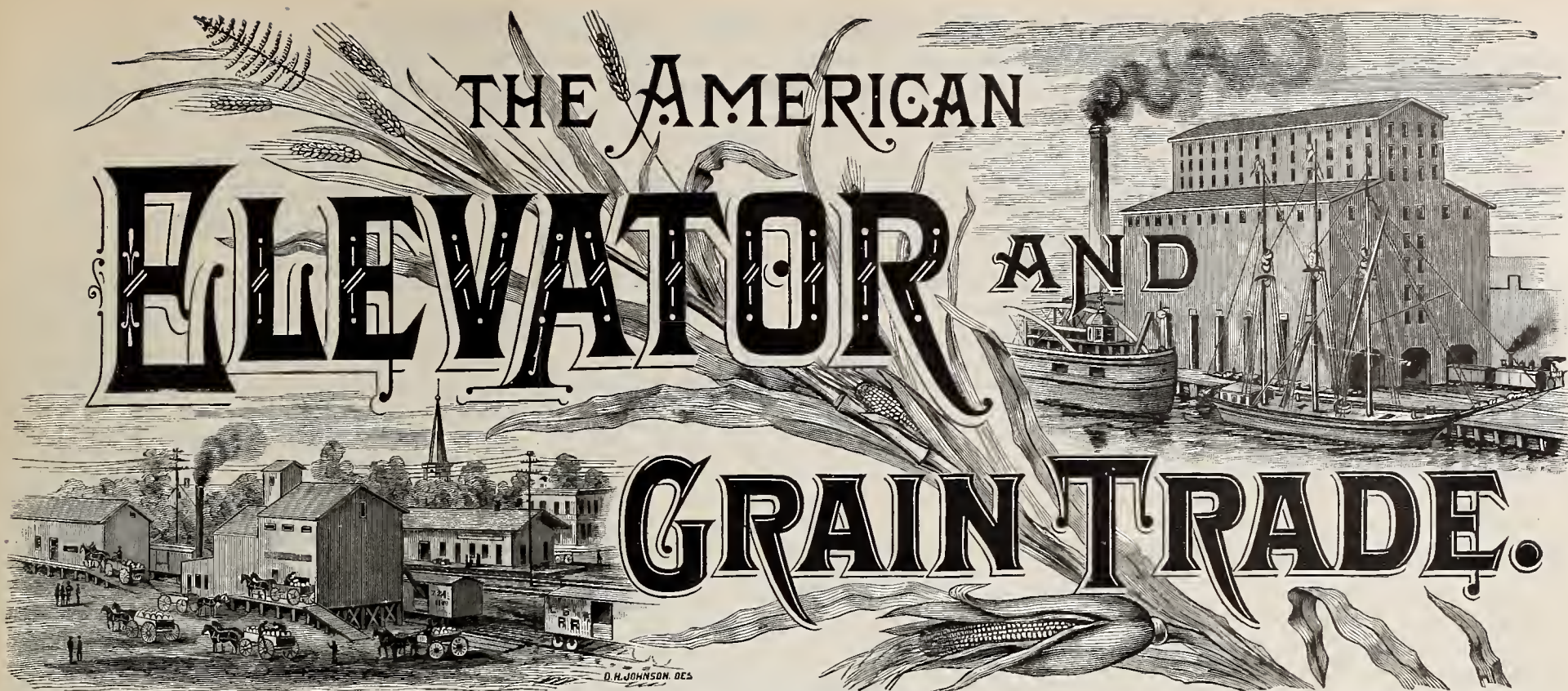
ALL OUR MACHINES ARE SOLD UNDER STRONG GUARANTEES, AND SHIPPED SUBJECT TO THIRTY DAYS' TRIAL.

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Huntley Manufacturing Co.,

Successors to HUNTLEY, CRANSON & HAMMOND,

SILVER CREEK, NEW YORK.



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THE CALUMET ELEVATOR COMPANY'S ELEVATOR IN SOUTH CHICAGO.

THE NEW CALUMET ELEVATOR AT SOUTH CHICAGO.

Notable among the valuable additions to the already large elevator facilities of Chicago during the past year is the new Calumet Elevator, located on Dock No. 3 of the Calumet River at the foot of One Hundred and Second street.

This elevator, shown in the accompanying illustration, was built for the Calumet Elevator Company by the Metcalf-Macdonald Company of Chicago. It occupies a ground space of 221 feet by 97 feet 8 inches and is 167 feet high, with bins 71 feet 6 inches deep. There are two unloading tracks through the house. The loading track is located on the outside and covered by a hanging shed.

It contains ten elevators with a handling capacity of 9,000 bushels each per hour. These are so arranged that five legs may be used for receiving and five for shipping, or all ten may be turned into receiving or shipping as requirements may justify.

The bin story is surmounted by a battered cupola five stories in height, the first story of which contains the telescope trolley spouts for distributing the grain from the scales to the bins. The second story contains a 36-inch belt conveyor, which may be run in either direction, and runs the entire length of the house, by which grain may be elevated at any leg and distributed to any bin on the dock side of the house. The third floor contains ten hopper scales of 1,200 bushels' capacity each. The fourth floor contains the ten garnerers of 1,200 bushels' capacity each; also the line shafting for driving the elevator heads. The fifth or top floor contains the elevator heads and spouting from same to scales.

The power plant is located in a brick building at the east end of the elevator, separated therefrom by a brick wall. The power house occupies a ground space of 81x40 feet, and has a brick stack 14 feet in diameter at the base and 169 feet high. The power plant consists of a battery of four boilers 72"x16 feet and a Reynolds-Corliss Condensing Engine of 600-horse power. The main engine shaft extends through into the elevator, on which is located a flywheel sheave 16 feet in diameter, grooved for nineteen 1½" ropes, fourteen of which transmit power direct to the line shaft located on the garner floor of cupola, from which power is distributed independently to the elevator heads. The remaining five grooves transmit power to the line shaft on the cleaner floor, which is located half way up in the bin story on the dock side, is 28x117 feet and contains three Howes Oat Clippers of 1,000 bushels' capacity each, and three Monitor Separators of 2,000 bushels' capacity each, all connected to Cyclone Dust Collectors with spouting, etc.

There are six dock bins fitted with improved dock spouts. The dock bins have direct spouts from the scales, which greatly facilitate the rapid handling of grain.

The house also contains a car puller of 15 cars' capacity, ten sets of Clark Power Grain Shovels and ten Metcalf Bifurcated Loading Spouts. All elevator heads, cleaning machines, etc., which the operator may desire to start or stop while the shafting is in motion, are equipped with steel plate friction clutches. All machinery for this plant was furnished by the Webster Manufacturing Company of Chicago.

The house is equipped with an electric light plant, driven by independent high-speed engine. A complete fire service system, including duplex fire pump standpipe, hose, nozzles and twin connection for steamer, is provided. Also a complete system of live air sweepers with attachments for burning the dust under the boilers.

The foundation for this elevator consists of piles driven in clusters of sixteen under the center piers and nine under the outside and corner piers. The piles are capped with three courses of oak and pine grillage and on top of this is laid the dimension stone piers which carry the superstructure.

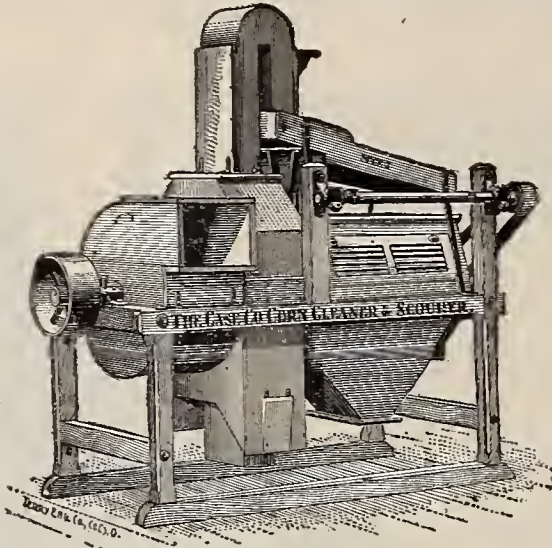
This house is a complete, modern equipped elevator in every respect, and reflects great credit upon the Metcalf-Macdonald Company, the designers and builders, who for many years have adhered to the policy of doing only strictly first-class and high grade work in every particular.

THE CASE CORN CLEANER.

Grain handlers and elevator men who have not had a great deal to do with corn heretofore will undoubtedly find it to their interest to be prepared to give attention to it this year. An abundant crop is promised this season, and while a great deal of corn will be fed to stock, a great deal more will be marketed. In this case economy at every point will demand cleaning and scouring. This will insure a better grade and add to the market value, which is just as important a point on a large as a small crop.

Recognizing these facts, the Case Manufacturing Company calls special attention to its corn cleaning and scouring machine, which we illustrate herewith. The Case Company's Corn Cleaner and Scourer is built with a perforated steel jacket with an open cylinder with cast corrugated scouring surface. It has a shaking shoe with perforated sieves for screening off the rough impurities of corn, and a fine screen for taking out sand, weed seeds or gravel, etc. A fan supplies a double suction for separating light material, such as silk, chaff, etc., before and after passing through the scourer. In thus scouring the corn this machine removes any dirt adhering to the grain, and scours the chit and husky end of the grain, the suction removing all the light grains, screenings and dust and leaving the corn bright and clean.

The machine takes up very little room and a small power will run it. It is built in three sizes, No. 1



THE CASE CORN CLEANER.

having a capacity of 15 to 20 bushels, No. 2 20 to 30 bushels and No. 3 30 to 50 bushels per hour. It is said to be a durable, well-built machine, peculiarly adapted for its work.

A GOOD CROP FOR MIXERS.

Those smaller commission firms and mixing elevators which profit largely by the spring wheat crop being irregular in quality and containing considerable foreign seed are hopeful, and not without some reason, that the new crop will be less uniform and clean than the last one, says the *Northwestern Miller*. The present crop has been exceptionally regular as to quality, and the mixing concerns have been pretty much deprived of their vocation, as there was very little material for them to work on. This condition has existed to such an extent that millers have been nearly as willing to accept wheat delivered from the big terminal houses in the city as that arriving directly from the interior.

In ordinary seasons they have regarded wheat from the elevators as quite inferior to that bought on arrival. This, in part, at least, is an explanation why the millers have been heavy buyers of futures on this crop. Being assured that the grain would come to them from elevator undoctored, they were willing to have delivery made by the seller of the option. In a number of instances, the wheat has been taken by the millers on futures held by them in advance of the regular delivery day. They would want the grain, and, paying a premium sufficient to defray the expense of actual delivery, the elevator that had sold the future would be glad to turn over the grain, by so doing stopping interest and insurance.

The growing crop promises to contain a good deal of foreign seed. The old one has afforded a dockage of

only about one pound on the average, but there is every indication that the proportion will be much higher on new wheat.

THE METRIC SYSTEM IN THE UNITED KINGDOM.

A movement is on foot which may, in a few years, work a strange revolution in all trades. We refer to the strong effort that is being made to introduce the metrical system of weights and measures into this country. A select committee of inquiry was appointed by the late government, and it has now made the following suggestions in the report:

"(a) That the metrical system of weights and measures be at once legalized for all purposes.

"(b) That after the lapse of two years the metrical system be rendered compulsory by act of Parliament.

"(c) That the metrical system of weights and measures be taught in all public and elementary schools as a necessary and integral part of arithmetic, and that decimals be introduced at an earlier period of the school curriculum than is the case at present."

Those who favor the adoption of the metrical system do so because, except Russia, all foreign countries have adopted it, and in our commercial dealings with them our system of weights causes great inconvenience and extra expense. The greater simplicity of the metric system is also counted in its favor. We can understand how anxious those engaged in foreign trade are to bring about this change; but, as home traders, the proposal and the prospect it raises are almost appalling. If we grant even the greater simplicity of the metric system and the great trouble it would save in the matter of bookkeeping, yet we can hardly look on the proposed change in any kindly spirit. If our system is cumbersome, we are so thoroughly used to it that its disadvantages are unnoticed or forgotten. Then what a wrench it would be to our feelings to dissociate ourselves forever from our familiar ounces, pounds and hundredweights. In Germany, it seems, the change to the metric system was effected in a week; but our commission more considerably recommends a two years' probationary period before its compulsory adoption. This, sentiment apart, is one of the changes which sooner or later is inevitable.—*British Baker*.

CLOSING CONTRACTS BY MAIL OR TELEGRAPH.

An enormous volume of business is done by mail and telegraph. Contracts may be so made. When an offer is made by letter, the Supreme Court of Missouri holds (*Egger vs. Nesbit*) that it may be accepted by letter and the contract closed, although the letter accepting the offer never reaches the hand of the person making the offer, providing the acceptance is mailed in due time, postage prepaid, and directed to the proper address of the person making the offer, or, if accepted by telegram, the charges being prepaid, and directed, as before stated, in regard to the acceptance by letter. The acceptance must be made within a reasonable time, no time being fixed, or before the offer is withdrawn. It must be unconditional and in strict accordance with the proposition: that is, the mind of the person making the offer and of the one accepting it must meet in regard to the same subject-matter and terms of sale. A proposal to accept, or an acceptance of an offer upon different terms from those contained in the offer, amounts to a rejection of it. The party making the offer may renew it; but the party receiving it cannot reply accepting with modifications, and, when these are rejected, again reply, accepting generally, and upon his acceptance claim the right of holding the other party to his first offer.—*Business Law*.

The first car of flaxseed from the present crop was received at Chicago, July 20. It was from the Southwest, and, being damp and field-damaged, graded Rejected.

The first car of new timothy seed was received at Chicago, July 20, but was not offered on sale. It was of good quality, not showing effects of dry weather so much as might have been expected. The color was not quite perfect, the seed being a little dark.

A MICHIGAN BEAN ELEVATOR.

The farmers of Michigan have of late years been gradually increasing their acreage planted to beans until that state has become one of the principal bean producing states of the Union. The crop has become such an important one that the grain dealers of some of the counties give more attention to the handling of beans than they do to grain. The handling of beans as well as peas properly belongs to their business and some of them have provided special facilities for grading and handling beans.

Livingston county is one of the principal bean producing counties of the state, and Howell, where C. E. Burns has recently erected the bean elevator illustrated herewith, is the principal bean market. This new elevator with its improved facilities for sorting, cleaning and storing was made necessary by the rapid increase in this branch of Mr. Burns' business. He buys large quantities from grain dealers in different parts of the state.

This elevator is planned especially for the handling of beans in carload lots and locally from wagons. It is one of the best for this purpose in the United States. The main building is 38x60, five stories high with an 8-foot basement. The storeroom is 30x40 feet, one story high. The first floor contains the cleaners and is used for a work room. The second floor is occupied by bins cribbed with 2x4 and is used for storage. The third floor is used for picking and has accommodations for 104 girls. The fourth floor is also taken up with bins, above which are elevator heads, water closets, wash room, etc.

The beans, when unloaded from car, are dumped into a receiving sink in the basement and carried by a conveyor across the building to the foot of an elevator, where they are elevated into a hopper, weighed, and then passed into a cleaner which removes the coarse matter and dust. They are then elevated to the storage bins. From there they are spouted into a second cleaner which thoroughly cleans and grades them, making 4 sizes. They are then elevated to the fourth floor over the picking room and are ready for the pickers.

The picking room contains 8 moving canvas belts 22 inches wide and about 10 feet long. Each of these belts will accommodate 8 pickers, 4 on each side, who on the best grade of beans will pick about 20 bushels per day each. These belts are only used for handling the best grades of beans, as beans that are damaged badly can be picked more perfectly on a stationary table. There are ten stationary tables accommodating four pickers each. The beans are spouted from these belts and tables to the bins below and from there into bags or barrels on the floor below for shipment.

Beans that are bought from the wagon are taken in at the opposite side from the railroad track and are handled in the same way, except that they go through the first cleaner before they are weighed. The girls are paid from 2½ cents to 6 cents per pound for each pound of poor beans they pick out, and they earn from \$3 to \$5 per week.

The power is furnished by a 15-horse power boiler and engine; the boiler also furnishing steam for heating the building throughout, there being about 2,000 feet of steam pipe used. The arrangement of the conveyors and elevators is such that there is no hand labor whatever except the picking out of the discolored beans and the sewing of the bags. The picking and

work rooms are lighted by electric lights so that all hands can work at least 10 hours per day.

In addition to being a wholesale dealer in beans Mr. Burns makes a specialty of choice milling wheat.

RYE IN RUSSIA.

BY ALFRED F. BENDER, ENGINEER, ST. PETERSBURG

Russians are said to live mainly on rye. It may be true of the greater (the Northern, Western and Eastern) portion of the country, as well as of Siberia. In the Southern portions wheat and vegetables form the chief foods. It may be of interest to the readers of the AMERICAN ELEVATOR AND GRAIN TRADE to get an idea of the range of prices of so important a factor

NEW PLAN FOR HANDLING GRAIN AT NEW YORK.

The members of the grain trade of the New York Produce Exchange are much interested in the proposition made by the Brooklyn Wharf and Warehouse Co. This company operates all the grain warehouses at that port, except the railroad elevators.

The proposition, in brief, is that the grain warehouses run as a complete and single system and that a blanket receipt should be issued for all grain, says the *Produce Exchange Reporter*.

The effect of the proposed plan, if adopted, will be that all graded grain, when delivered to the company, entirely loses its identity and shall be stored in whatever warehouse the managers of the company designate; and when the receipt is

presented for return of the grain that any grain shall be delivered at any warehouse providing it is of the same grade as that called for by the receipt.

There are three distinct interests concerned in the proposition. They are, in the first place, the receivers, second, the shippers, and third, the steamship people.

The receivers are perhaps the greatest enemies of the change, especially those who are also exporters, as they usually send grain adapted for export purposes to special warehouses, where they can easily get it when their orders demand it.

The new plan would, of course, prevent a continuance of this business, as one receipt would naturally be as good as another.

Shippers are inclined to object to the plan on the ground that its object is to enable the warehouse company to deliver long standing and other wheat, that bids fair to be soon out of condition. They argue, therefore, that shippers would receive the very worst wheat that can be delivered on contract, and they argue further that this idea will very rapidly find credence abroad and will tend to restrict what little export demand now exists. The steamship people's objections resolve themselves chiefly into the fact that the tendency would be to stop competition. In other words, when making concessions in rates to shippers at the present time, the steamship agents make it a condition that the grain shall be delivered from some favorite warehouse. Should the warehouse company's plan be adopted, they argue, one

shipper's grain will be as good as another's and the element of barter will be eliminated from the business.

The present grain rules provide that two or more warehouses contiguous, owned or operated by one individual or firm, in which grain is stored, shall constitute what shall be known as a "system," and warehouse receipts, designating the warehouses comprised in such a system, may be issued without designating the particular warehouse in which the grain was delivered. Such warehouses shall be conveniently approachable by ocean vessels, and shall have customary shipping facilities, including elevators.

The opponents of the plan started an aggressive movement in the form of a petition, liberally signed, which was presented to the board of managers, asking that, as certain changes were proposed in handling grain, the entire matter of port charges on grain be investigated. The petition sets forth that New York is losing its grain business on account of the heavy port charges. It is expected that the managers will take immediate action upon the resolution.

The cost of handling grain at the port of New York



C. E. BURNS' BEAN ELEVATOR AT HOWELL, MICH.

in the nourishment of a nation, especially in the districts which are often visited by famine, where rye ought to be in steady demand and therefore selling at good prices.

The newspaper *Orenburgski Kry* recently published interesting statistics giving the highest and lowest prices of rye at Samara, on the Volga, during the last 16 years. These are as follows, the prices being given in copecs per pood (2 copecs being equal to 1 cent and 1 pood to 36 pounds avoirdupois): In 1878-79, highest 47.1, lowest 39.3; 1879-80, 71.7, 61.4; 1880-81, 128.3, 116.1; 1881-82, 79, 72.8; 1882-83, 62.6, 57.6; 1883-84, 68.6, 62.1; 1884-85, 49.9, 43.7; 1885-86, 52.5, 45.5; 1886-87, 43.9, 35.9; 1887-88, 45.6, 39.2; 1888-89, 52.1, 45.4; 1889-90, 62, 55.7; 1890-91, 65.5, 59; 1891-92, 131.8, 122.8; 1892-93, 75.2, 69.2; 1893-94, 40, 35.2.

It will be seen that during the whole period of 16 years to the end of 1894 prices were lowest during the last year. In 1886 rye dropped very low indeed, though not quite so low as last fall. Other cereals have met with a like depreciation, especially in the Southern districts, where crops were abundant. Barley, for instance, went as low as 3 cents per 36 pounds.

is $1\frac{1}{2}$ cents per bushel, which is $\frac{1}{2}$ cent per bushel higher than the law provides. The $\frac{1}{2}$ cent is an arbitrary charge known as "extra storage" in the case of the grain being in the warehouse, and transportation of elevator in the case of grain afloat.

At New York all railroad grain is delivered by the railroads free of extra cost alongside any steamship within harbor. The owner of the grain, however, has to pay the railroad company $1\frac{1}{2}$ cents per bushel for the simple transfer of the grain from the lighter to the steamer, and the railroad pays this entire charge of $1\frac{1}{2}$ cents per bushel to the floating elevator. It is this charge that the petition contemplates shall be investigated.

THE DICKEY OVERBLAST SUCTION SEPARATOR.

We present herewith an illustration of the Dickey Overblast Suction Separator. The makers of this machine, the A. P. Dickey Mfg. Co., being one of the oldest, if not the oldest grain cleaning house in this country, needs no introduction. The cut is a fair representation of the machine, which is said to be having widespread popularity with elevator men.

Some years since the trade of this house called for a separator which was low in height so that it could be easily spouted to in houses with low ceilings, a machine which was well built, and would clean rapidly and well all kinds of seeds, be dustless in fact as well as in name, be able to use the suction without waste, be run by horse power if necessary, and sell for a reasonable price. In response to this demand the overblast was invented after considerable hard study, experiment and cost and is now enjoying its fourth successful year on the market.

The company reports that it is hardly able to keep up with orders and is running overtime. It writes, "our experience being that where one separator is sold it creates a constant demand for cleaners of the same class from all parties who see them work." The company is still manufacturing a full line of warehouse cleaners to be run by hand or power, as well as the Quadruple for larger elevators, and anyone desiring such goods can consult it by writing to it at Racine, Wis., where it has its shops. This Overblast Suction Separator is provided when desired with a flax attachment which consists of a countershaft operating a couple of automatic rappers and a shoe resting on a ratchet roller. These give to the sieves the agitation necessary to keep them clean and keep the mustard seed bounding in the air until it finally passes over the tail end of the sieve. There is so much wild mustard in grain this year that it promises to cause elevator men considerable trouble, as it is difficult to get out.

WHY THE CLEANER DID NOT WORK.

The grain cleaning machinery men no doubt are frequently convinced of the fact that all elevator men are not practical mechanics. A machine maker who has spent many years in the business and knows all about the construction and operation of cleaning machinery had an expensive experience recently which thoroughly convinced him that there are elevator men who know very little about machinery.

He shipped a cleaner to an elevator man about 400 miles away and sent what he considered full instructions for its erection and operation. No sooner had it been set up than the elevator man commenced to send letters to the maker complaining that it would not do the work it was guaranteed to do and asked him to send another machine. Several letters passed between the seller and buyer in an effort to remedy the difficulty. The maker tried his best to learn what was the trouble, but all in vain. The buyer finally got out of patience and telegraphed the maker that something must be done quickly or he would throw the machine out. Grain receipts were heavy and he needed a good machine to clean it.

The next day a representative of the maker walked into the elevator and after shaking off the effects of a cold reception asked to see the machine. He looked it over and found that the fan was being run

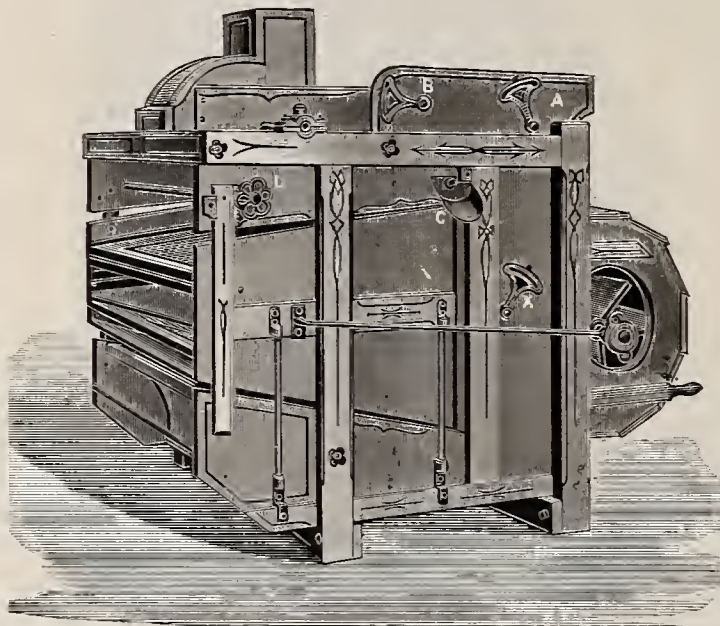
backward. He took off the belt, twisted it and started the machine with the fan running the right way.

The elevator man dropped his supercilious air and stared at the belt until his eyes watered. When he found power to overcome his surprise he said: "Why damn that belt. I didn't suppose it made any difference which way it ran." The maker accepted his loss on that machine without complaint and the elevator man bought no more machines of the maker because he was ashamed of the way he had needlessly put the maker to trouble and expense without proper return.

LEGISLATION AGAINST FUTURES.

BY HENRY CROSBY EMERY, IN THE "POLITICAL SCIENCE QUARTERLY."

The advocates of anti-option legislation have certainly not made good their first and most important claim, that the extension of these fictitious transactions has put the market into the control of the short-seller. They find strong support, however, in the fact that the price of farm products, and of wheat especially, has suffered a great decline. On this they base a negative argument to this effect: Since the high price of wheat in 1882 there has been a steady decline of price, till now wheat is worth not much more than half what it was at that time; there is no increase in



THE DICKEY OVERBLAST SUCTION SEPARATOR.

supply to warrant this change, for the acreage of wheat lands has not increased in the last twelve years: therefore some "sinister causes" must be at work—causes that have arisen since 1882. The system of selling "illimitable fictitious products" has arisen since that time; in it, then, we find the sinister influence that has depressed the price.

This is plainly in contradiction to the most familiar facts. In the first place, there has not been a steady decline in the price of wheat since 1882. The price fell for about five years, reacted after 1887, culminated in 1891, and since that time has fallen off again in the most startling manner; we ought then to find corresponding variations in the "sinister cause." But the system of short-selling has steadily increased in importance without any such changes. Furthermore, the system was developed some years before 1882, and it was due to large fictitious transactions in that year that the Chicago price was kept above the price in other markets and higher than actual conditions warranted. And thirdly, though the acreage and the crops in this country after 1882 showed no increase over the years just preceding, the fact was that America no longer made the price of wheat. All wheat-raising countries had come into the market, and the characteristic feature of the years after 1882 was an increase in the world's supply. The conditions have again changed in this country, and the excessive supplies of the last few years, combined with Russian and (worst of all, because unexpected) Argentine competition, make it unnecessary to seek more "sinister causes" for the course of prices. As to the fall in the last few years, the following is instructive: The total available stocks of wheat in the United States, Canada, in and afloat for Europe, and in Australia on July 1, 1894, 154,000,000 bushels; July 1, 1893, 157,000,000;

July 1, 1892, 102,000,000; July 1, 1891, 89,000,000; July 1, 1890, 74,000,000; July 1, 1889, 68,000,000.

DOMESTIC STOCKS OF WHEAT DECEMBER 1, WITH COMPARISONS.

In U. S. and Canada.	East Rockies.	Pacific coast.	Both coasts.
Dec. 1, 1894.....	113,116,000	14,582,000	127,698,000
Dec. 1, 1893.....	96,597,000	10,629,000	107,226,000
Dec. 1, 1892.....	94,671,000	10,415,000	105,086,000
Dec. 1, 1891.....	62,328,000	10,619,000	72,948,000
Dec. 1, 1890.....	44,843,000	12,361,000	57,205,000
Dec. 1, 1889.....	54,455,000	8,120,000	62,575,000
Dec. 1, 1888.....	51,394,000	6,476,000	57,871,000

And yet in the face of such conditions as these, we are told that there are absolutely no "natural causes" for the recent fall in price!

But suppose it be admitted that the short-seller does not control the market—that there are forces of equal strength on the other side devoted to the advancement of prices; have we then proved that the system is not reprehensible? Can we justify the determination of prices by this "juggling with the product of the farmer," even if it be as easy to juggle prices up as to juggle them down? This question was answered in the first part of this paper. The function of speculation was there shown to be the establishing of a price for future commodities. A means of fixing a price for future products would have been a blessing to trade at any time; but when, with increased facili-

ties for communication and transportation, the market for the staple agricultural products became a world market, some such means became a necessity. Otherwise all trade would have been speculation. Space has not been taken in this paper to consider the particular ways in which risks can be shifted to the speculating class. The most familiar of these is the practice of millers, elevator men and exporters, in "selling against" the stocks which they hold or export. The advocates of these bills say that this practice can still be continued under the new regime, overlooking the fact that it would not be possible except for organized speculation in the hands of a special class.

The price for future goods, like any price, can be made only by buying and selling, and it depends on the demand and supply in respect to future goods. Let the farmer, then, fix the price, say the anti-optionists. Why should he be "de-spoiled of that voice in fixing the price of the product of his labor and capital which is accorded to other producers?" But the prices deter-

mined by speculation are prices for future goods and are made by transactions based on probable future conditions. These conditions are purely matters of estimate, and the farmers as a class are not able to weigh the numberless influences which may affect the future market for their commodities. Only those men who have great experience, wide knowledge and the most improved means of obtaining information, combined with cool judgment, courage and the faculty of quick decision, are competent to forecast the course of future prices and forestall the probable event by their own purchases and sales. And it is the great speculators who combine these qualities in the greatest degree.

When, therefore, the distinguished sponsor of the Senate bill charges the exchanges of the country with being mere "price factories," the exchanges may well admit the truth of the charge. That is just what they ought to be. We have seen that, by making prices which express the opinion of the most intelligent men, they direct production and distribution into the most profitable channels. Through these "price factories" the intelligent farmer is enabled to market his crop with greater profit and less danger of loss than would be possible if the old system were applied to modern conditions. On the other hand it may be that the shiftless and dull are affected as such persons are in all walks of life by the adoption of more intelligent methods by their competitors.

The main charge, however, is that these prices are made regardless of the law of supply and demand. The objects of the House bill of 1894, as stated in the report of the committee on agriculture, were "to restore to the law of supply and demand that free action which has been destroyed by the practice of 'short-selling,'" and to afford relief "by restoring the functions of the law of supply and demand now inoperative

by reason of the limitless offers of the short-seller;" and still further, "to restore to the producer an honest market and such prices as will follow the unfettered action of the law of supply and demand." Similarly, in the speeches made in support of such legislation great stress is laid on the iniquity of an infringement of this law.

[TO BE CONTINUED.]

THE HESSIAN FLY.

BY PROF. W. G. JOHNSON, CHAMPAIGN, ILL.

The Hessian fly (*Cecidomyia destructor*), the chinch bug (*Blissus cencopterus*), rust and drouth have been the principal factors in the enormous reduction of the wheat crop during the present season. Of these four destructive agents, the first, the Hessian fly, has been responsible for the greatest amount of damage. In many counties in Illinois wheat would have yielded a fair crop had it not been for this pest. Thousands of acres of winter wheat were plowed up last spring, thousands pastured and not cut, while that which was harvested yielded only about one-half a crop. The entire crop in the three great states of Ohio, Indiana and Illinois is only about one-half the number of bushels produced last year, which was estimated at about 125,000,000. This enormous shortage has been due largely to the Hessian fly. The destruction of wheat in the central Mississippi valley by this insect has been almost complete in many places.

A milling company in Minnesota sent the publishers of this journal some wheat straw with the following statement: "The wheat contains worms which have caused great havoc in many wheat fields in this vicinity. They are found in the first and second joints of the straw, and where they appear the straw seems to decay and fall to the ground. Some fields appear as though they had been visited with a hailstorm."

This material was referred to me and upon examination I found numbers of "flaxseeds," that is, the puparia of the Hessian fly, in the straw. This insect is one of the greatest insect pests now established on American soil. The total loss during the present season by this creature alone, throughout the great wheat growing belt of the United States, will aggregate more than a hundred million dollars.

In the illustration given herewith a healthy stalk of wheat is represented on the left, while the one on the right is dwarfed, the stem being swollen near the ground where the flaxseeds are situated between the stem and the sheathing at the base of the leaf. An egg is represented at *a*, very much enlarged, the hair line at the side representing the natural size; *b* shows the larva or young, which is the real destructive agent, as it is in this stage that the injury is done; *c* represents a flaxseed, the case in which the pupa *d* remains until fully matured when the adult fly emerges; *e* shows the fly, natural size, on the leaf depositing her eggs; *f* and *g* are female and male enlarged; and *i* is a small hymenopterous parasite which feeds upon the pupæ within the flaxseeds.

The Hessian fly is one of the most destructive of our noxious insects and as it attacks wheat, our most important agricultural product, its life-history cannot be too often repeated. It is found from the Atlantic ocean west through the great wheat-growing districts and from the great lakes to the Gulf of Mexico, and was known in this country before the revolution. It seems strange that an insect so small and delicate that it can scarcely stand a breath of wind could be the means of destroying thousands of acres of wheat some years, amounting to many millions of dollars.

The adult insect is a very small gnat-like creature, *e*,

with two wings and is scarcely a quarter of an inch long. In early autumn the female fly, which is represented at *f* very much enlarged, deposits her eggs upon the upper surface of the blade of the young wheat plant, as shown at *e*. The young larvæ (*b*, very much enlarged) hatch in a few days and descend the leaf to the base of the sheath, where they attach themselves, head downward, to the stalk, and begin to absorb the life-sap of the plant. As the plant grows the young become imbedded in the stalk, when they become stationary. They are of a reddish color at first, but become semi-transparent a little later. In about six weeks they reach full growth, and the skin of the larvæ becomes loose and assumes a wide spindle-shaped form, while the body within changes to a bright chestnut color and becomes a pupa *d*, which is popularly known as the "flaxseed" state *c*,

mended and where practiced is productive of good results. In regions infested by the fly it is advisable to sow the more hardy varieties or those found less liable to attacks. The Underhill Mediterranean wheat, and especially the Lancaster variety, has been recommended in preference to the lighter, less vigorous kinds, in a region which is much infested by the fly.

KICK AS LONG AS SHORTAGES OCCUR.

The grain dealer who frequently suffers loss by shortages in his shipments can lose nothing by following the example of the frog in the story told by a New York dealer who does not run a dairy.

Once upon a time two frogs that had been living in comfort and ease in a cool pool of water were accidentally scooped up by a milkman in a bucket of water, which he poured into his can in order to give his milk more body and thereby increase his revenue. The frogs were astonished to find themselves in an unknown element, in which it was not possible to support life, and they had to kick vigorously in order to keep their heads above the milk. One of them, being disheartened by being shut up in the dark, in an element entirely new to him, said: "Let's give it up and go to the bottom; it's no use kicking any longer." The other said: "Oh, no, let's keep kicking as long as we can, and see what the outcome will be. Maybe things will change presently." So one frog gave it up and went to the bottom. The other kept kicking, and when the milkman got to town and opened his can, behold the frog had kicked out a lump of butter large enough to float him, and he was sitting on it comfortably. Moral: *Keep kicking.*

The losses suffered by shortages have prompted many shippers to give up and go to the bottom. Others have so persistently and vigorously protested against these "trifling shortages," as the terminal elevator men call them, that they have practically secured release from this imposition. Kicking has become quite profitable in the grain trade. Some of the carriers make it a rule to give a shipper his just rights only when he fights for them.

OPPOSED TO STATE INSPECTION FOR PEORIA.

Ex-Mayor Miles had a curious experience with a member of a legislative committee on state grain inspection. This man looked like an honorable, straightforward gentleman. He told Mr. Miles, in so many words, that some of his associates appeared to be hankering for

the root of all evil, but for his part he wanted no boodle whatever. Moreover, he did not deem it just to impose state grain inspection handicaps on Peoria business men. Down in his part of the state it is different, and he believed such inspection should be tacked to East St. Louis. He hoped we would be able to elect a governor next time, and with state grain inspection in vogue in East St. Louis, near his district, he stood a good show of being appointed chief grain inspector.

This, in the language of Warren Buckley, is the squarest game that these gentlemen play.—*Journal, Peoria, Ill.*

After July 1 the charges for the reinspection of grain delivered from special bins at terminal elevators in Minnesota will be as follows: When delivered into cars, \$1 per car, unless the original grade or dockage is changed, in which case no charge will be made; \$1 per 1,000 bushels or less when reinspection is made within the elevator in running stream. The last charge will be made regardless of the result of inspection.



THE HESSIAN FLY.

owing to its close resemblance to a flaxseed. It remains in this condition during the winter and emerges the following spring to lay eggs which develop in time to attack the autumn-sown wheat.

The Hessian fly has its natural enemies which are very small four-winged insects, one of which is represented in the figure at *i*, very much enlarged. The young of these insects, of which there are several species native to this country, prey upon the fly while it is in the flaxseed state, and no doubt greatly lessen the damage the pest would otherwise incur. A parasite of this insect was found in England which was far more abundant and beneficial than any of our native species. For this reason the creature was brought to this country in large numbers and distributed by the United States entomologist at various points and placed in charge of competent observers in Illinois, Indiana, Michigan and Canada. The results of this importation have not, thus far, been very marked. It is very difficult to ascertain the existence of a parasite of such a minute size, except when it occurs in great numbers.

Late sowing of the main crop is generally recom-

FLAXSEED AT CHICAGO.

According to the report of S. H. Stevens, flaxseed inspector at Chicago, Ill., the estimated crop of flaxseed raised west of Chicago during the year 1894 amounted to 7,500,000 bushels. Of this amount the inspected receipts at Chicago aggregated 4,342,412 bushels. The estimated crop for the year 1893 amounted to 12,500,000 bushels, of which the inspected receipts at Chicago aggregated 7,093,686 bushels. The estimated crop for 1892 amounted to 12,191,000 bushels, of which the inspected receipts at Chicago aggregated 6,684,150 bushels. The estimated crop for 1891 amounted to 19,000,000 bushels, of which the inspected receipts aggregated 15,038,100 bushels. The estimated crop for 1890 amounted to 13,250,000 bushels, of which the inspected receipts aggregated 8,732,050 bushels.

The flaxseed in store in regular elevators at Chicago on July 27, 1895, amounted to 4,413 bushels. On Aug. 4, 1894, the seed in store amounted to 212,709; on July 29, 1893, to 90,904 bushels; July 30, 1892, to 2,711,234; on Aug. 1, 1891, to 165,155, and Aug. 2, 1890, the amount in store amounted to 34,309 bushels.

The price of cash flaxseed per bushel on the Chicago market Aug. 1, 1895, was \$1.19; Aug. 1, 1894, \$1.25 per bushel; Aug. 1, 1893, \$1.00; Aug. 1, 1892, \$1.01½; Aug. 1, 1891, \$1.03; Aug. 1, 1890, \$1.33½.

STATE INSPECTION FOR WASHINGTON.

Governor McGraw has taken the final action necessary to put in force the grain inspection law in Washington by the appointment of Percy W. Lawrence, a grain dealer at Garfield for twelve years, as chief inspector, at a salary of \$1,800 a year. W. H. Reed of Reed & Co., well-known Tacoma grain merchants, and Senator R. C. McCrosky of Garfield county, are the other members of the commission, which is to have headquarters at Tacoma, as the chief grain exporting point of the state, and until such time as some other city shall overtake her in that direction. Deputy inspectors will be located at Seattle and Spokane.

The first duties of the commission will be the establishment of standard grades for Washington wheat, which must be done before September of each year. Inspection is provided for all grain shipped for milling or export in conformity with these grades, unless sold by sample, and not stored or milled in transit; through grain originally consigned to points outside the state is not subject to this regulation. The cost of inspection is not to exceed 75 cents a car for sacked wheat and 50 cents a car for bulk wheat, and where a re-inspection is demanded by either shipper or receiver it shall be final, and if first grades are found to be correct, re-inspection shall be at the expense of the party making the demand.

The bill at its inception was demanded and championed by growers, but later their interest flagged and shippers took up the measure and put it through. It has the drawback of difficult inspection by sacks, as compared with the usual method of shipping in bulk employed in other states, but it is hoped that it will give satisfaction.

Mr. Reed, says the *West Coast Trade*, is one of the best known grain men of the state and enjoys thoroughly the confidence of the growers. His large farming interests about Walla Walla and the prominent part taken by him in securing rate reductions upon the railroads, cheapening the cost of grain sacks, and other moves beneficial to the farmers, will prove influential in convincing shippers that their interests will be conserved in the grading. The chief inspector, Mr. Lawrence, as well as Senator McCroskey, a prominent grange man, are equally well known throughout the Palouse country, and as a whole the shippers can depend beyond doubt upon getting the full benefits which the quality of their grain merits. The minimum cost at which the grading is to be done will certainly not be felt to any serious extent, and it is believed by local buyers that the movement will prove more beneficial in building up Puget Sound grain markets than any system of grading which could be followed.

Chief Inspector Lawrence will have three chief deputies, one at Spokane, Tacoma and Seattle. They will receive \$1,200 per year. The qualifications are

prescribed by law. "The deputy inspectors shall be expert grain men with at least three years' experience handling grain, and shall take an oath of office, and shall each give bonds to the state of Washington in the penal sum of \$5,000, with good and sufficient sureties, to be approved by the governor and attorney general."

Four grades of wheat will be established, grades No. 1, 2 and 3 and rejected wheat. Grades will also be established for oats and barley. The commission will make rules to govern the inspection of grain. These will be such that the grades established will cover the grain from all districts.

EFFECT UPON COMMERCE OF POOLING BY TRANSPORTATION LINES.

[From an address delivered at Detroit by George R. Blanchard, Chairman of the Central Traffic Association.]

On July 4, 1827, Charles Carroll of Carrollton, then the last surviving signer of the declaration of independence, laid at Baltimore the cornerstone of the first chartered American railway. Forty-one years later a golden spike driven on a Wyoming summit, marking also the summit of American commercial achievement, united rails touching the Chesapeake with those on the wharves of the Golden Gate. We had built a new path for old nations. This Maryland seed has grown to nearly 200,000 miles of American



CHIEF GRAIN INSPECTOR P. W. LAWRENCE.

railway, over one-half of the world's mileage, and 29 miles for every 10,000 inhabitants, while Germany, France, England and Austria average but 6.2 miles. In 1893 our freight rates averaged but 73 per cent., and our passenger fares but 66 per cent. of those of the same countries, plus Belgium. In thus leading the nations in gross mileage, mileage per capita, lowness of charge, swiftness of construction, area traversed, diversity of conditions and phenomenal national development, especially in the West, hastily considered charters, subsidies, exemptions from taxation, land gratuities, large capitalizations, etc., were demanded and granted. Under such conditions railway building exceeded the needs and traffic of localities, and strife involving open and hidden abuses crept into their tariffs and methods. Mutual burdens, discriminations and discriminations followed, and as permanent equity is essential to stability of contract, first came granger agitation, then restrictions, reprisals and repeals to impair the original relations. Out of these swiftly reviewed conditions grew the Windom committee of '74 which reported, but 20 years since, that national ownership and control were "the only means of securing and maintaining reliable and effective competition between railways."

The Cullom committee reviewed the subject 12 years later, when our average charge for carrying one ton one mile had been reduced from 2.35 to 1.19 cents, over 49 per cent., and the average passenger fare from 3.20 cents per mile to 2.36 cents, over 26 per cent. Both were decreased without national enactment, and the Windom committee was refuted.

Witness the enormous economic and commercial results. If the average rate of '74 had prevailed in '86, the increase from freight only in the latter year would

have been \$612,000,000. This exhibits the inaptitude of lawmakers to comprehend great industrial problems and forces, and confirms the younger Stephenson, who said: "We do not impute to parliament that it is dishonest. Neither its practical experience nor its time nor its system of procedure are adapted for railway legislation."

Witness also the causes in which provisions of the interstate act have been set aside by our courts. When the Cullom committee confronted the problem it said with more knowledge and caution: "The regulation of rates and fares by law is probably one of the most difficult problems ever presented."

Its report urged national intervention, especially to prevent unjust discrimination against persons and places, 12 of its 18 counts relating thereto. It also especially considered pooling. Of 149 persons it questioned, 42 favored pooling generally, 26 legalized pools, 41 pools with proper restrictions, and no opposing witness offered an acceptable substitute. For these cogent reasons it reported: "It would seem wiser to permit such agreements rather than by prohibiting them to render the enforcement and maintenance of agreed rates impracticable." For like reasons the law it proposed provided:

"Said interstate commission shall especially inquire into that method of railway management or combination known as pooling, and report to Congress what, if any, legislation is advisable and expedient upon the subject."

With due credit to its just purposes, none maintain that the act thus amended, as passed, intended to benefit railways or even to create mutual conditions or incentives. Passing over its failures and its minor defects, its chief error was that it refused railways the right by enforceable contract to maintain reasonable rates, as the act itself required, through the only effectual means yet found in the commercial and railway experience of the world, viz., pools, traffic unity, or joint purses. This brings me to discuss the effect of pooling upon commerce, but first let us consider the effects of non-pooling.

After eight years with the act it is of public knowledge that serious irregularities continue, benefiting mainly large shippers who, plus yielding railways, compel conditions which injure smaller senders and places and well-intending carriers beyond their powers of resistance or correction. Law does not create rectitude, and the main agency to correct wrongs practiced by carriers or shippers or collusively must be the railways themselves, but the act gave them no helps to that end; only mandates and penalties. Nevertheless the pendulum of more intelligent public experience, thought and conviction now swings more equitably, and no great commercial measure has ever secured more support from former opposers, as witness these proofs. In '93 the Senate referred the subject to the interstate commission for reconsideration, whereupon it asked commercial bodies and others as to the advisability of amending the act so as to legalize "pooling contracts which would tend to diminish unlawful discriminations."

Eighty-nine answers favored so doing or the entire repeal of the act. June 13, '94, a conference in Washington, of commercial interests representing twenty-three states and eighty-seven trade bodies, including your own, unanimously recommended the passage of the Patterson bill.

Pooling was also indorsed in Washington, December, '94, by all the state railway commissions except Minnesota, when they "resolved that competing common carriers may safely be permitted to make lawful contracts with each other for the apportionment of their traffic or the earnings therefrom, provided conditions and restrictions be imposed which protect the public from excessive and unreasonable charges." Its resolution met with the concurrence of the interstate commission. The National Board of Trade has twice recommended such legislation, and all these judgments were confirmed by sixty-six majority in the House of Representatives, upon vote. Pools are legally authorized or are permitted between private railways in England, France, Belgium, Germany, Austria, Switzerland and Italy; in instances between state and private railways and sometimes between railroads and water carriers.

I also quote your esteemed, just and experienced jurist, Judge Cooley: "If a rate when made by one

company as a local rate would in law be unobjectionable, it would be equally so when made by several as a joint rate. The more completely the whole railway system of the country can be treated as a unit, as if it were all under one management, the greater will be its service to the country and the less the liability of unfair exactions."

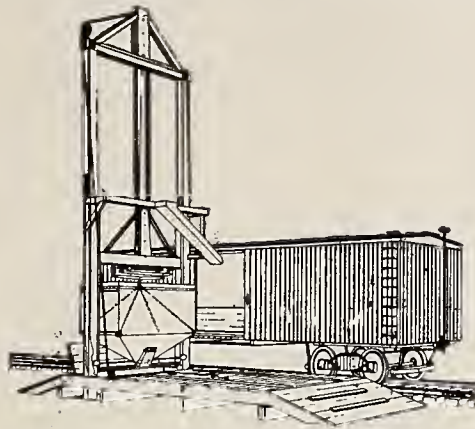
I might stop here and say that these competent authorities have already studied and decided the commercial effects of pools, but, say our yet unconvinced friends: "You ask Congress to legislate trusts or combinations which will stifle competition and unduly advance rates," and they inquire with triumphant logic: "If railways do not intend these things why do they desire pools?" Unlike trusts, we seek to extend, not curtail, production and facility and we do not seek to enhance prices. Next, mark the clear distinction between reasonable rivalry and senseless strife; between stopping competition and regulating it, and between railway conditions and those affecting oil, corn and iron.

The Windom committee said and the Cullom committee confirmed this conclusion: "The uniform testimony deduced from practical results in this country and through the commercial world is that water routes are the natural competitors and most effective regulators of railway transportation."

Other restrictive instrumentalities are: 1. Artificial waterways allied with lakes, tides and rivers, Lakes Michigan and Erie with the Erie Canal and the ocean 2. Rivalries in grain growing, as Iowa with Illinois; the contentions of consuming and manufacturing cities, as Chicago with St. Louis and Cincinnati; the export contests of seaboard cities, as Boston with New York; the contentions of iron markets, as Alabama with Pennsylvania; in cotton planting, as Mississippi with Texas, etc. 3. The rivalries of nations in common markets, as the United States with Russia and the Argentine Republic in wheat; Manchester with Fall River in cottons, etc. 4. The watchfulness and importunities of shippers and trade bodies; restrictive

one of the cases decided was the reasonableness of the rates called in question, and in that single instance the claim was decided to be not well founded." Its president has testified that if the Pennsylvania Railroad obtained the average charges of the London & Northwestern Company its earnings one year would have increased \$12,000,000.

Had all our railways charged the lowest of the reported European rates and fares in '92, they would have collected \$370,000,000 more in that year than they received. Permit now a few illustrative conditions: In the transportation of mail, moneys, troops,



LOCKWOOD'S AUTOMATIC SCALE AND ELEVATOR.

munitions, supplies, materials for public buildings, etc., the government is perhaps the largest railway patron, and, inasmuch as it probably never seeks or demands private concessions, the published rates prevail thereon, while the railways simultaneously yield allowances to others. Is it not also as much a governmental duty to restrain wrongful rate depleting practices, which injure well intending shippers and well managed railways, as well as to prevent the curtailment or ruin of trade by excessive charges? The law says our rates shall not be more or less,

way fails it continues active and is often deemed by its successors, competitors and the public as then best equipped to grant the lowest rates, being the exceptional business of earth which may be increased upon insolvent capital.

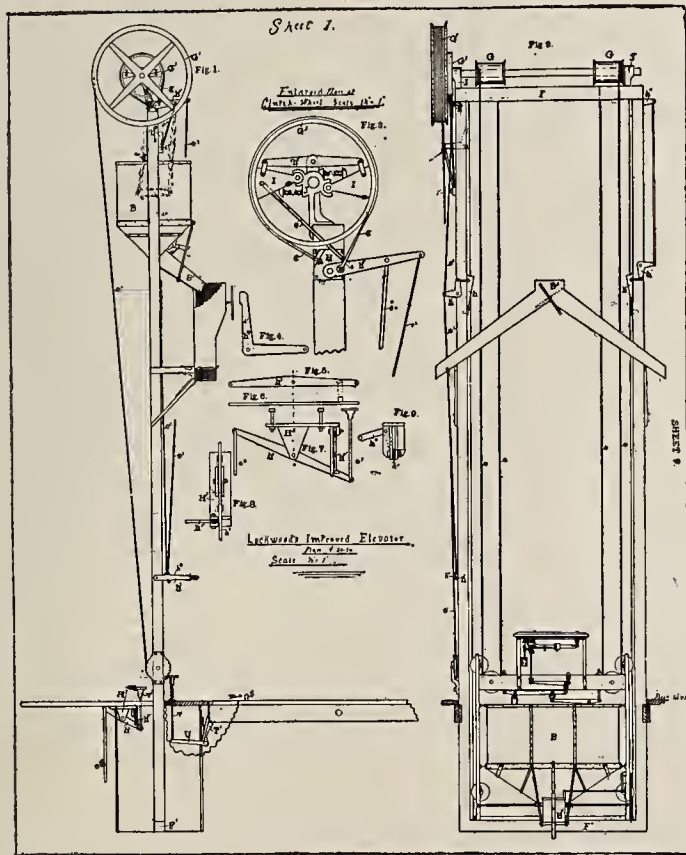
LOCKWOOD'S AUTOMATIC SCALE AND ELEVATOR.

We illustrate herewith a novel device for transferring grain in wagonload lots from wagons to bins or cars. It consists of a dump placed as low as possible and a hopper scale with the beam giving the weight in bushels and pounds, so no figuring is required. The farmer's team elevates the grain. All kinds of small grain can be handled and readily transferred from wagon to car or bin and from bin to car.

In its simplest form this device consists only of a dump platform, two upright posts well braced, the hoisting mechanism and the hopper of 65 to 100 bushels' capacity for weighing and elevating. It is easily operated. The loaded wagon is driven on the dump while the hopper is elevated. By pulling a lever the hopper is dropped just behind the wagon. Then the end gate of the wagon is removed and the operator presses his foot on the triprod which releases the dump and the grain is dropped into the hopper and weighed.

The end of a wire rope is then hooked to the hind axle of the wagon and the team is driven out until the load is elevated to position, where it rests on iron dogs. The spouting is automatically connected and the valve opened, delivering the grain into any desired bin or car.

By means of a system of winding drums, as shown, the draft required to elevate a load is greatly reduced. Friction clutch shoes engage with a clutch rim on the main shaft and hold the load at any desired point, and a powerful ribbon brake regulates the speed of the hopper in coming down. The hopper is made of sheet steel and provided with straps and rods to make it



LOCKWOOD'S AUTOMATIC GRAIN ELEVATOR AND SCALE.

legislation and the urgency of the press. 5. The rivalries of railways leading from and to contending districts and points and the desire of their managers to adjust their charges to secure the largest tonnage at fair rates rather than diminish it by undue rates.

After these inexorable forces have determined reasonable rates, they cannot be advanced by railway combinations nor should they be depleted through railway contentions. If railways can advance rates against such limitations by pooling or otherwise, why have they not done so to avoid the bankruptcies of one-third of their railway capital and mileage?

As to undue charges since the act, the former statistician of the treasury, Mr. Nimmo, has said: "During the year ending Dec. 31, 1893, only sixteen cases came to a formal consideration and hearing. In only

etc. Pools are moreover analogous to uniform, undiminished and legally enforceable governmental charges which are the people's pools, and their impartial enforcement is clearly beneficial to commerce and all the people.

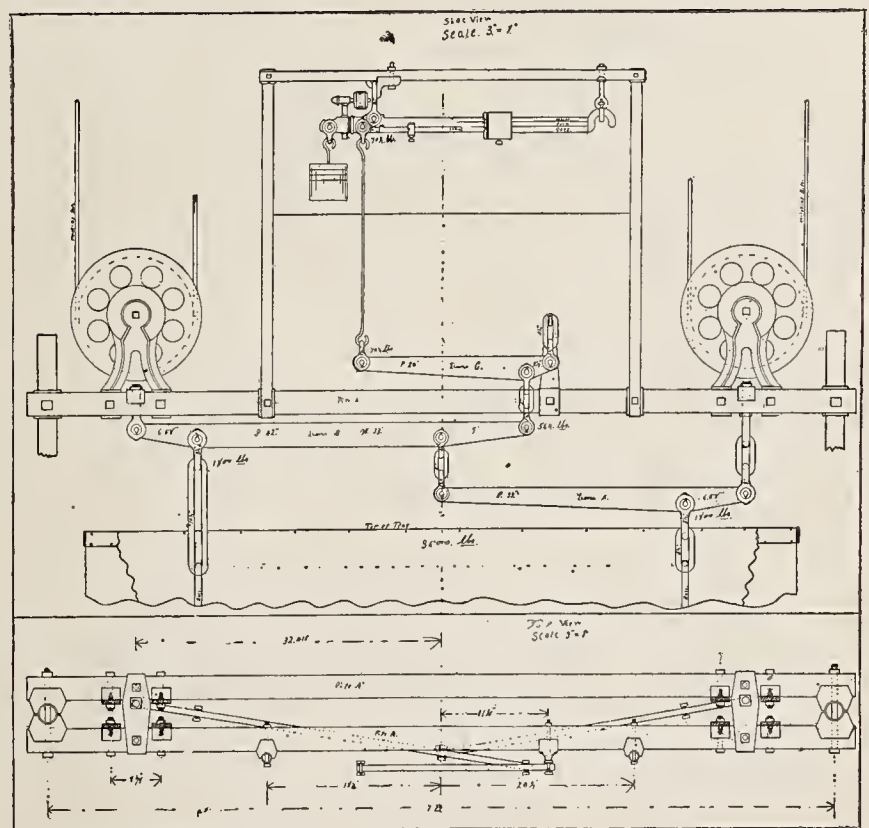
We do not lack proofs of the actual results to commerce from pooling. The Trunk Line pool was from New York only and continued for ten years, in which period the tonnage doubled and the rates were reduced over 30 per cent. The rival cities were not pooled, yet secured a lesser increase of business. The Iowa pool continued honorably for 17 years. The tonnage grew vastly, rates were reduced an average of 4 per cent. and all the region thrived.

It is a trite legend that when one of the competitors in trade fails he retires from rivalry, but when a rail-

strong and durable. The frame in which it swings is also made of iron. Deep grooved sheaves attached to this frame travel on tee-rail tracks, which are secured to the inside of the upright posts. The dump is provided with an automatic wagon block and a dump lock.

The scale and elevator is also made to be used in connection with a small storage.

The small cut shows the scale and elevator without any covering. It is designed for loading cars from wagons. All parts exposed to the weather are thoroughly painted. It is much better, however, to have the dump and shaft covered with iron sides and roof. Any additional information can be secured by addressing the Lockwood Scale and Elevator Mfg. Company, Winfield, Kan.



WALLS OF CORN.

BY ELLEN P. ALLERTON, BROWN COUNTY, KANSAS.

Smiling and beautiful, heaven's dome
Bends softly over our prairie home,
But the wide, wide lands that stretched away
Before my eyes in the days of May,
The rolling prairies' billowy swell,
Breezy upland and the timbered dell,
Stately mansion and hut forlorn,
All are hidden by walls of corn.
All the wide world is narrowed down
To walls of corn, now sere and brown.
What do they hold—these walls of corn?
Whose banners toss on the breeze of morn?
He who questions may soon be told,
A great state's wealth these walls enfold.

No sentinels guard these walls of corn,
Never is sounded the warders' horn;
Yet the pillars are hung with gleaming gold,
Left all unbarred, though thieves are bold.
Clothes and food for the toiling poor,
Wealth to heap at the rich man's door;
Meat for the healthy, and balm for him
Who moans and tosses in chamber din;
Shoes for the barefooted, pearls to twine
In the scented tresses of ladies fine;
Things of use for the lowly cot,
Where (bless the corn) want cometh not;
Luxuries rare for the mansion grand,
Gifts of a rich and fertile land;
All these things, and so many more
It would fill a book to name them o'er,
Are hid and held in these walls of corn,
Whose banners toss on the breeze of morn.

Where do they stand, these walls of corn,
Whose banners toss on the breeze of morn?
Open the atlas, conned by rule,
In the olden days of the district school.
Point to the rich and bounteous land,
That yields such fruit to the toiler's hand.
"Treeless desert" they called it then,
Haunted by beasts and forsook by men.
Little they knew what wealth untold
Lay hid where the desolate prairies rolled.
Who would have dared, with brush or pen,
As this land is now, to paint it then?
And how would the wise ones have laughed in scorn
Had prophet foretold these walls of corn,
Whose banners toss in the breeze of morn!



[We invite correspondence from everyone in any way interested in the grain trade, or all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

SHIPPING AT TACOMA.

Editor American Elevator and Grain Trade:—According to the report of the harbor-master of the port of Tacoma, Wash., for the month of July, the total exportation of breadstuffs was as follows: There was no wheat; flour, 21,060 barrels, to China, valued at \$51,980. The inward registered tonnage was 48,206 tons; outward registered tonnage 40,666 tons; inward cargoes, 22,323 tons; outward cargoes, 45,354 tons. Deep sea arrivals, 33. Imports during the past seven months were valued at \$6,182,209.84, exports at \$2,587,915.93. SAMUEL COLLYER,

Secretary Chamber of Commerce.

Tacoma, Wash.

STORAGE RATES AT TOLEDO.

Editor American Elevator and Grain Trade:—We wish to announce through your journal that, until further notice, on all sound grain our elevating charges, including storage for ten days or any part thereof, will be $\frac{1}{2}$ cent per bushel, and for each succeeding ten days or any part thereof a storage charge of $\frac{1}{4}$ cent a bushel. For storage of grain not below No 3 (exclusive of elevating charges) from August 1 until December 5 our charges will be the same as the summer rate, except in cases where storage has accumulated as follows: On and after Aug. 1, 1895, to 2 cents a bushel, September 1 to 2 cents a bushel, October 1 to $1\frac{1}{2}$ cents a bushel, November 1 to $\frac{3}{4}$ cent a bushel. After which there will be no further storage charge until and including Dec. 5, 1895.

For winter storage (exclusive of elevating charges) from Aug. 1, 1895, to April 15, 1896, inclusive, the rate will be the same as the summer rate, except in cases where storage has accumulated as follows: On

and after Aug. 1, 1895, to 4 cents a bushel, September 1 to 4 cents a bushel, October 1 to $3\frac{1}{2}$ cents a bushel, November 1 to 3 cents a bushel, December 1 to $2\frac{1}{2}$ cents a bushel. After which there will be no further storage charge until and including April 15, 1896.

I. E. HAVILAND,

Superintendent Toledo & Wabash Elevator Company.
Toledo, Ohio.

IOWA CROPS AND ELEVATORS.

Editor American Elevator and Grain Trade:—This is a boom year for Iowa. Never in the history of the state has there been a heavier yield of grain than this season. Harvest is nearly completed and the hum of the steam thrashers is heard on every hand. Oats are yielding from 40 to 60 bushels, and in many cases 75 to 80 bushels per acre, machine measure, wheat from 18 to 30 bushels. One piece of barley of nine acres yielded 90 bushels per acre, machine measure. Flax and corn are equally good. Yet in the face of all these facts I heard only the other day one of those chronic grumblers (a farmer, of course) whining about poor crops, and because the farmers would not get more than one-half or two-thirds of a crop.

This has been one of the best seasons for elevators for the past ten years. I am just completing a 20,000-bushel elevator for K. K. Lequin of Dysart, Iowa, and am laying the foundation for another the same size for F. S. Livermore. Both are equipped with a fine line of machinery. A gasoline engine will be used in each case for motive power. This will make three elevators at Buffalo Center, all of the same capacity, that I have built. I also erected two elevators at Germania, Iowa, eight miles west of Buffalo Center. There is good prospect of two or three more elevators being built on this line—the B, C. R. & N.—yet this season.

C. A. BAMBER.

Iowa Falls, Iowa.

STORAGE AT INTERIOR POINTS.

Editor American Elevator and Grain Trade:—The recent incorporation of a grain storage company which intends to do business at a certain interior point in Ohio raises again the problem of the feasibility of storing grain at interior points.

I believe there are disadvantages in storing grain in interior elevators which grain buyers should bear in mind. In the first place, the advantage of the terminal over the interior point is a matter of market. Where there is little or no competition to buy, market values will be at their lowest normal state, and the price of the grain will be acted upon more directly by the simple law of supply and demand. Add to this the fact that the interior point generally has not the advantages in the way of transportation and handling that the terminal possesses. Competition at the terminal point comes in again, and results in a reaching out for the greatest improved facilities and the lowest rates, which is unknown in the interior.

For the same reasons transshipments are made more expeditiously from a terminal point. Railroads and waterways are at hand, carrying grain by the most direct route to its final destination at the least cost. This does not always characterize the interior. An amusing illustration of the possibilities of shipping is shown in the case of the farmer's frantic hunt for the best market. He shipped a consignment of wheat to an interior market where he was offered 25 cents per bushel. By paying 15 cents more for transportation to another market he could obtain 40 cents per bushel; by doubling around in another direction he could get a still higher price, but the freight bill would not allow him to net over 25 cents per bushel. By direct shipment to the point of the highest market the transportation charges would have been less and the profits higher.

Thus saith one elevator man.

But we must not lose sight of the advantages of storing grain at interior points. I think it can be done profitably to both dealers and elevator companies. It is again a matter of market, and the interior point has its market. Neighboring mills are enabled to obtain their supply of grain at a slightly reduced price because of the charge for transportation to a more distant market increasing the market value of the grain, and are more than willing to get their supply at or near home when that is possible and the source reliable.

Objections on the ground of lack of shipping facili-

ties are not unanswerable. Interior cities of Michigan, Ohio, Illinois, the Eastern states and others are easily reached by railroads, though there is room for improvement. Then the massive machinery of the grain trade at terminal points does not obtain in the interior. This means no switching charges, less or no unloading and weighing charges, no inspection charges—naturally reduced charges all round.

As for the oft-praised competition, cousin-german to demand and supply, competitors at terminal points sometimes bethink themselves of their advantageous position (one real advantage of a terminal point) and form a little combination and close-half the elevators. And when the law allows one-fourth of a cent transfer charges they tack on five-eighths of a cent more, just like Buffalo. That is an example of the possibilities of terminal elevators.

A company which goes into the business of storing wheat at an interior point should be managed most carefully, taking nothing but good grain, making the receipts reliable and merchantable, and doing a storage business exclusively, not attempting to run a general dealer's business of buying and selling. If it goes into business with these intentions, and it locates at a point where good transportation facilities are afforded, at a fair rate, it ought to gain the respect, confidence and patronage of reliable grain dealers and consumers.

I have thought this subject worthy the attention of the readers of the AMERICAN ELEVATOR AND GRAIN TRADE, and would be pleased to read the opinions of others.

MICHIGAN DEALER.

DOTS AND DASHES.

The Cincinnati Grain and Hay Receivers' Association held a meeting August 6 and changed some of its rules.

A seasonable reminder is that a little more care in cleaning the new grain would greatly benefit the interior shipper.

The first Virginia new wheat of 1895 was sold in Richmond, Va., June 27. This is five days later than in 1894, but the price per bushel, 85 cents, is 23 cents higher.

The United States plant almost one million acres more of potatoes annually than Great Britain; yet that country produces more bushels than the United States. The moral is obvious.

Property in the hands of a common carrier in transit to a place outside of the state is not subject to garnishment, although it is yet within the state at the time of the service of the garnishee summons.

The Canadian Pacific Railway has announced a rate on hay of \$4 per ton, by water, from Fort William to Ontario points west of and including Toronto. The rate from Winnipeg to Fort William is 17 cents per 100 pounds.

Armour Elevator "C" at Chicago has been dropped from the list of class "A" warehouses and is no longer regular. This takes it out of the visible and also from the regular stocks. On July 29 the house had 493,014 bushels wheat, 24,189 bushels corn and 5,618 bushels oats.

The grand jury has voted indictments against the following owners of alleged bucket shops in Chicago: White, Adams, King, Thayer, Bush, Johnson, Goodwin, Leman and Bale. The evidence upon which indictments were returned was secured by a committee of the grand jury.

"A Summer Note-Book" is the title of a book issued by the Michigan Central Railroad. It is profusely illustrated and a fine specimen of the "art preservative." It will be sent to any address by O. W. Rugles, general passenger and ticket agent, Chicago, upon receipt of 10 cents.

Two cars of new spring wheat were received at Chicago, July 29, from Northwestern Iowa. They inspected No. 2 and were of the hard variety, selling at 75 cents f. o. b. These were the first cars of spring wheat received this season. The first car last season was received on August 1, inspected No. 4 and sold at 46 cents f. o. b.

ABOUT TRACK SCALE WEIGHING.

NO. II.

BY J. A. DEMUTH.

In writing of the untenableness of the "robbery" theory as an explanation of the shortage question, I do not wish to be understood as contending that docking is not a factor in the problem. On the contrary, I know from personal observation that it is a factor and a considerable one. But to the man who rides the robbery hobby this particular theory is entertained to the exclusion of all others. From time to time I have had personal encounters with shippers who have galloped into my office on one of these same hobbies, booted and spurred, and in such a state of mind that the office walls were none too secure, only to prance out again after an ineffectual thrust or two of their favorite weapon.

There are very few shippers who would not be willing to stand a shortage of from 20 to 40 pounds if the shortage never exceeded the greater amount. This might be called robbery, dockage or toll, but if no greater shortages occurred very few shippers would consider the matter a burdensome tax. There are those, I know, who contend that no toll whatever should be taken, that the weights at terminal elevators should tally exactly with shipper's weights. They hold that if any provision for shrinkage and waste is necessary it should be met by a regular charge in the expense bill. I have no doubt that terminal elevators generally would be glad to make this sort of an arrangement, and if wheat could be exchanged with no less abrasion than silver, gold and bank checks this would be an ideal way of mending the evil. This has never been and never will be the case. Grain will always be subject to wastage and shrinkage in handling and shortages will continue to exist however carefully and honestly the weighing is done.

Twenty years ago a very small percentage of grain coming to our elevators was billed at actual weights. A car billed at 18,000 might weigh 15,000 or 25,000. Our weighmen and clerks were completely in the dark as to whether our weights were over or short. On one occasion we discovered an error in setting down weights of empty cars which made one shipper over about 2,000 pounds and another short the same. The short man complained and we suspected there was a mistake because we knew him to be a careful shipper. The "overage" went to a shipper on the C. W. & M. road in whom we had not the slightest confidence. We paid the shortage and waited until the C. W. & M. man shipped in another car before we said anything to him about the 2,000 pounds error. When the car came I was instructed to deduct 2,000 therefrom and write the shipper the reason therefor. This occurred in the busy season when we were working night and day to prevent a blockade, and the letter was not written for more than a week. In the meantime the shipper had received his "account sales" without a murmur. When my letter was received, however, he raised a breeze and was full of wrath and denied that he had ever received 2,000 pounds too much. It was a strange and unaccountable thing to me that he never said a word about the 2,000 pounds which we had deducted and which he must have known about if he could be so sure that he had never received 2,000 pounds too much. I presume the facts in the case were that with his small scale the work of weighing a load into a car was too tedious and so the grain was shoveled in without weighing. I am sure that as long ago as twenty years this was done by a great many shippers. Many of them owned only small scales and if they did weigh their grain for shipment the drafts were so numerous, and also the opportunities for omitting tallies and committing other errors, that the results were not apt to give them much confidence in their weights.

I have said that track scales are usually fairly reliable where they are carefully handled. From my experience I would not trust the best of them without some means of testing them with an invariable weight of at least 5,000 pounds. However, they have several points of advantage over small hopper scales. One is that the entire load is weighed at once. The mind of the weighman is therefore centered on that one operation. With small hopper scales the operation is so

many times repeated that the work becomes monotonous and errors are very apt to occur. Then, too, a slight deviation from a perfect balance of the beam results, in a number of drafts, in a considerable difference. Another point of advantage is the weighing of the carload en route. This, however, is of value only when it is weighed more than once, or when the gross weights happen to tally in cases where it is weighed but once. If the gross weight at shipping point is 54,790 and the gross weight at some point en route is 54,770, the proof is conclusive enough that both scales are in order. Then, if the car weighs out short in terminal elevator—say a thousand pounds or such a matter—the shipper need only to prove by his system of recording weights, if he has one, that there were no errors made at his end of the line to throw the responsibility for the error on the terminal elevator.

A track scale should first of all be a good one. A cheap scale is a dear one. Then it should be well housed and protected against strong drafts during the operation of weighing. The following is a table of the weights of 25 cars received at our elevators from Westfield, a station on the L. N. A. & C. Ry., for whose weighman I have a considerable degree of respect:

	West- field.	Toledo	Dif.		West- field.	Toledo	Dif.
1887.	Net.	Net.		1887.	Net.	Net.	
July 13	39,300	39,280 s	20	July 15	24,665	24,660 s	5
13	34,745	33,810 s	935	16	28,300	28,340 o	40
13	28,990	28,970 s	20	18	49,900	40,880 s	20
12	41,200	41,180 s	20	18	28,100	28,030 s	70
13	26,900	25,940 s	40	19	30,400	30,420 o	20
14	25,360	25,510 o	150	21	24,250	24,210 s	40
14	25,100	25,180 o	80	21	25,400	25,430 o	30
14	29,090	29,130 o	130	21	37,115	37,030 s	85
14	23,050	23,060 o	10	21	24,800	24,820 o	20
14	30,600	30,450 s	150	22	26,700	26,760 o	60
14	35,600	35,550 s	50	Aug. 15	37,000	34,98 s	2,020
14	24,390	27,540 o	3,150	15	29,000	28,770 s	30
15	28,000	28,000					

I never learned how the weighing at this station was done, but conjectured that a 50-bushel hopper scale was used. This theory would seem to explain the surplus of 3,150 pounds in car shipped July 14.

Another station in whose weights I came to have some degree of interest was Muncie, on the I. W. C. & L. Ry. In this case also I never learned how the weighing was done and the error on October 8 is still a mystery to me. Evidently the shippers recognized the fact that grain is liable to a small shortage in shipment and so systematically put into each car an extra bushel or two. It is also apparent in a number of cases that we didn't take it, even when it was offered.

	1887.	Muncie	Toledo	Dif.		1887.	Muncie	Toledo	Dif.
July 30	40,000	40,120 o	120		Aug. 27	30,000	29,970 s	30	
Aug. 1	40,000	40,030 o	30		30	30,000	30,060 o	60	
2	30,000	30,000	.....		31	30,000	30,050 o	50	
2	40,000	40,030 o	30		Sept. 1	30,000	29,960 s	40	
4	33,000	33,120 o	120		7	40,000	40,56 o	560	
4	33,000	33,040 o	40		6	40,000	40,310 o	310	
6	40,000	39,910 s	90		15	30,000	30,000	.....
8	28,000	27,820 s	180		17	36,000	36,120 o	120	
8	30,000	29,950 s	50		24	30,000	30,070 o	70	
9	40,000	40,050 o	50		27	30,000	30,090 o	90	
10	30,000	30,040 o	40		Oct. 3	36,000	36,000	.....
13	30,000	30,020 o	20		6	40,000	40,030 o	30	
13	24,000	24,050 o	50		8	24,300	26,910 o	2,610	
25	30,000	30,060 o	60		11	40,000	40,060 o	60	
26	30,000	30,000	.....					

It seems to me that careful weighing was the rule at both of these stations, and I remember that in correspondence with the shipper at one of these points, I do not recall which one, he expressed satisfaction with and confidence in our weights. On our own road we had not more than eight or ten stations whose weights were uniformly close to ours. One station agent, who was invariably short from 200 to 350 pounds on every car and who did more complaining about our weights than any other agent on our road, was finally asked to explain how it came that notwithstanding our "steal" of from 200 to 350 pounds a car he still had a larger surplus than other agents whose weights were uniformly close with ours. The inference was that he was billing his grain to us at more than actual weight or else he was taking heavier toll from farmers than he should. In his effort to fasten the charge of "stealings" on us he unwittingly saddled it upon himself, and he was shortly afterward decapitated. Now the fact that we had a number of stations on our own road and a number on other roads

(for whose weights we were not at all responsible), with whom our weights tallied closely, makes it clear to my mind that no one cause is more responsible for differences in weights than careless weighing, and more of this is done in the country than at terminal elevators.

[TO BE CONTINUED.]

SCREENINGS.

November—The naked hills lie wanton to the breeze;
Nude are the fields, the groves unfrocked;
Bared are the shivering limbs of shameless trees,—
What wonder that the corn is shocked?

Has a wheel in its head—an elevator.

Always does a pushing business—a screw conveyor.

Of course the farmer will have a large crop of oats, with nothing to feed them to but bicycles.—*Omaha Bee.*

That "hold your wheat" pamphlet which the farmers of the Northwest are now pondering is merely an evidence of circular insanity.

What with the Hessian fly, the chinch-bug and the bulls and bears the state of the wheat market is properly a matter for the study of the zoölogist.

Over the grave of the bucket-shop man
They inscribed with reverent pen
This epitaph: "Here lieth one
Who loved his country-men."

"How would you like to be thrashed as I am?" complained the wheat to the corn.

"I would a good deal rather be thrashed than have my ears pulled," answered the corn.

"Who is that old party?" asked a slangy young man from the East, who was in Kansas. "Young feller," spoke up the citizen, who had overheard him, "ye're wrong in your reckonin'. I ain't no old party. I've seceded from the Populists an' come out fur baled hay ez legal tender for all debts. I'm a new party, I am."

A crop reporter in Southern Illinois climbed upon a fence the other day to take a general survey of a field of oats, and while there he became interested in seeing a snake rise into sight, the curious feature in his movements being the surprise manifested by his snakeship in being unable to get down to the earth again from the heads of the grain, because the oats stood so thickly and majestically in their magnificent growth. And this he believed to be a sample of the Western indications as to the yield of oats.

"I'm in a hurry," he said, rushing into a hardware store. "Just got time to catch a train. Give me a corn-popper, quick!"

"All right, sir," replied the clerk. "Do you want a large pop-corner?"

"No, just a medium-sized—an ordinary corn-copper."

"How will this corn-copper do?"

"Is that a corn-copper?"

"Yes. But you're getting twisted. You mean a corn-copper. No, a corn-copper! No, a—"

"I mean a corn-copper!"

"Oh, yes, a corn-copper!"

"Yes, be quick! Gimme a corn-copper, and be quick!"

"All right. Here's your corn-copper."—*Industrial World.*

It was during the recent rise in wheat and a disgusted speculator stood in one of the commission houses, taking the quotations from the tape.

"How's it going?" asked the man at his elbow.

"Up," he replied, shortly.

"Any chance for a drop?"

"Naw."

"There must be something wrong."

"Sure. There always is. It's climbing as if it never intended to stop."

"Is there any explanation given for it?"

"Dozens of 'em."

"Well, what do you think is the trouble?"

"Oh, I suppose the grasshoppers have got into the ice crop."

And he turned on his heel and walked disgustedly away.

THIRTY YEARS IN THE GRAIN TRADE.

BY EGERTON R. WILLIAMS IN THE "NORTH AMERICAN REVIEW."

On viewing briefly the history of the grain trade for the last three decades, which measure nearly the limit of the writer's experience, the chief difficulty encountered is not that of calling to mind the many prominent changes, developments and their most important effects, but of giving full credence thereto; and this in the face of personal knowledge of many of them and of authentic statistical corroboration of many more. In no previous thirty years of this country's history has such phenomenal progress been made in all that pertains to man's material welfare—progress so far beyond any precedent that we are tempted to believe there can be no counterpart in the future.

In this article I shall consider the word "trade" not merely in the ordinary significance of traffic, but in the broader sense, inclusive of production and consumption.

The first effect of an extended and cheapened telegraphic service was the seeming drawing nearer to each other of the grain importing countries of Europe and the exporting countries of America, Asia, Australia and Argentina, resulting in an almost complete abandonment of the old—and since Europe's infant commercial days—established custom of procuring and storing supplies several months in advance of their requirements. A hand-to-mouth system was adopted, purchases were made by cable, and time of shipment arranged to meet the wants of the European miller and corn factor. This new method brought about in time keener competition and reduced commissions or profits to the exporter, the importer, and the European factor.

The differences in value between the markets of consumption and those of production narrowed to an unprecedented extent, and this narrow margin for expenses and profit has, in exceptional instances, continued ever since, and bids fair to continue indefinitely. This reduction in the cost of delivered grain inures, of course, chiefly to the consumer's advantage.

It is an anomalous condition of things commercial, but nevertheless generally true, that the more grain there is to be transported the less are the per-bushel earnings of the inland and ocean carrier. The solution lies in the fact that, as a rule, large crops produce low prices, consequent upon supply being in excess of demand; and low freights are the usual accompaniment of low prices. The converse of this proposition is generally a commercial fact.

The railroads of late years have entered so keenly into competition with the lake routes for the grain traffic that, to meet this speedy, effective and cheap land transportation, the construction of steam vessels and tows of very large capacity and increased speed became imperative. These lake leviathans require in the aggregate but few men for their management, and being run at very small expense, compared with other tonnage differently constructed, or when their immense capacity is considered, have been able not only to successfully compete with land transit, but to make such minimum rates of freight as to result in driving from the traffic—if not from the lakes—vessels of small tonnage, and in placing a permanent embargo upon their further construction.

Freights have fallen from an average range on the lakes of $\frac{1}{5}$ cent to $\frac{1}{4}$ cent; on the ocean from $\frac{1}{2}$ cent to $\frac{3}{8}$ cent; and all fall to the seaboard from $\frac{3}{8}$ cent to $\frac{1}{8}$ cent per bushel.

The adoption of the hand-to-mouth policy by our millers and dealers (and this same policy governs their customers and their customers' customers, until the purchaser of the 10-pound bag of flour is reached) is largely due to the narrow margin of profit generally obtainable. This profit is not very infrequently, particularly in large transactions, so small and unremunerative that a reversal of the old system is very often the safer course. Sale is made by the miller of his product, and by the dealer of grain or flour, before the purchase is effected. What can better illustrate the radical change a few short years have effected in business methods than we here find, in that, what at as late a period as the 70's was deemed hazardous

gambling, indulged in by a few and frowned upon by a vast majority, is now commended and preferred by the most conservative. In fact, it is this class who most frequently make sale of property not at the time in their possession nor owned by them.

We well remember how very slow Europeans were to take advantage of the above noted method of protection against loss of moment on their purchases, even when strongly adverse markets with them offered the most convincing motive. But these theoretic moralists are to-day, and of late years have been, among the largest "wind" operators on our exchanges, and, more than that, have transferred flourishing twigs from this indigenous American speculative plant to their own shores.

Paralleling, to some extent in importance and degree, the phenomenal increase in grain area and production in the United States has been the decline thereof in England since 1869, when free trade in wheat and all other farm products was first fully established. In that year about 97 per cent. of England's population, viz., 18½ millions out of a total of 19 millions, were fed upon English home-grown wheat. In 1890, with a population of 25 millions, only 5 millions were supplied with English wheat, a falling off of 77 per cent.

The decrease in wheat acreage in 40 years, from 1846 to 1886, was nearly 66 per cent., viz., from 3½ million acres to 1,200,000 acres. This decline is not attributable to exhaustion of wheat lands, for the average yield continued to be, and still is, about 28 bushels per acre, against 12½ in the United States, 16 in France, 11 in Germany, 8 in Russia and 10 in Italy. "It is almost certain that the wheat area (English) will be the smallest in a century" (*Mark Lane Express*, Oct. 15, 1894). A better appreciation, by the general reader, of the extent of the disaster resulting from a falling off in home crops sufficient in 1869 to feed 97 per cent. of population, to crops competent to supply only 20 per cent. in 1890, can be gathered from the following data obtained from figures furnished by "Her Majesty's Commissioner of Customs."

In 1890 the imports of the United Kingdom of wheat, wheatmeal and flour amounted in value to 270 millions of dollars. Total imports of farm products, live animals included, in the same year reached the enormous total of 555 millions of dollars, or more than one-third of the whole value of British exports of all classes for the said year, and at the rate of about 14½ dollars per capita. These enormous importations appear incredible when we consider that the British Isles have about 45 millions of acres of arable land to maintain less than 40 millions of people—being over 1½ acres for each inhabitant.

The estimated British imports, wheat and flour, for 1895 are 189,799,630 bushels, against 152,474,000 in 1890, and 119,894,431 in 1877.

In most striking and, to us, most gratifying contrast to the above truly appalling figures is the exhibit of our agricultural condition made by ex-President Harrison in his last annual message. We quote as follows: "The value of total farm products has increased from \$1,363,646,866 in 1860 to \$4,500,000,000 in 1891, as estimated by statisticians—an increase of 230 per cent." The total farm value of grain, hay, potato and tobacco products alone reached in 1894 the enormous total of \$1,630,861,632, with prices at minimum figures. The average annual increment from 1821 to 1890 is stated at \$901,000,000. The wealth added in the thirty years 1860 to 1890 was 49 milliards—more than the total wealth of Great Britain. Agricultural wealth has been quadrupled in forty years, and urban wealth has multiplied sixteen-fold.

When, in addition to the enormous decrease in England's acreage, we reflect upon the low wheat values which, with occasional exceptions, have ruled during the last four years—notably this year—the impoverishment of the English farmer dependent upon grain products can be, in a measure at least, imagined. He is favored with a high average yield and low wages, but these advantages are more than offset by high rentals and low prices. The excess of price which he obtains beyond that of the American farmer is by radical reduction in through transportation, inland and ocean, very greatly less than that prevailing a comparatively few years ago. While the American farmer pays higher wages, he pays less of them, through the substitution of steam and horse machin-

ery for manual labor. Again, his land freehold, the price paid per acre for his land in the far West or Northwest, is in many instances less than the leasehold of his English competitor. This the latter pays yearly, the former but once. Statistics show that the farmer in England pays in rental, taxes and poor rates about \$14 per year on every acre of wheat land; and the wheat producer of America who rents his farm pays on an average in rental and taxes only about \$2 per acre.

The American agriculturist, who, in company with the agriculturists the world over, has suffered the penalty of over-production, can trace a large portion of his own trouble to his own door. Unlike the more scientific European or Canadian farmer, who saves his soil by rotation of crops, the American maintains an unbroken monotony of wheat-raising, to the impoverishment alike of his land and of himself. Wheat in the Chicago market has fallen from an annual average of \$1.11½ for twenty-six years, 1867 to 1892, to a minimum of 54 cents in 1893, 50 cents in 1894, and 49 cents in January, 1895.

Verily, a knotty problem of the future is not the one agitated a few years ago: "How shall the nations of the world be fed?" but, "What shall be done with the surplus that the nations produce?" There is a limit to the consumption, to the bread wants of the people of the inhabited portions of this globe of ours; but statisticians have been unable to define the extent of the capability of production, particularly of countries of continental area such as America, India, Russia, Argentina, Australia and Canada.

Exceptional partial crop failures, such as lately recorded in Argentina and now threatened in America, offer some temporary solution of the problem. Through such influences accumulated surpluses can be reduced.

The aggregate production of those which in the writer's youth were termed "the great wheat-producing states," the wheat belt of the country, would now afford a subject for merriment to the "Farmer Princes" of the far West, the possessors of farms each of which yields an output greater than that of counties in the olden times. Maryland, Virginia, Pennsylvania, New York, with her universally known fruitful Genesee Valley, Ohio, Michigan, Indiana, Kentucky, have been shorn of many of their wheat laurels. "Westward the star of empire takes its way." The control of the future destinies of this country will be determined by the nation's majority whose dwellings will be west of the Mississippi; and thitherward has already traveled the "wheat empire."

One of the greatest anomalies, probably the greatest in the grain trade, is that the measure of value is determined by the comparatively small quantity that is shipped, and that the much greater quantity that is consumed at home is no more of an actual factor in the foreign market than if it did not exist. The first conclusion after consideration of this matter would very naturally be as follows: For the goods we send to the European market, in which we are aware we shall find competition from other sellers from other countries, of articles of the same or approximate quality to our own, for these goods we must accept the best bid obtainable and rest content therewith. But that the European prices should determine, should definitely and arbitrarily fix American values, that the less factor should control the greater, is an incongruity difficult for many to comprehend or with which to become reconciled. The burden of the complaint of the producing, milling, trading and transporting interests is that the "verdict of values" is rendered in a foreign, competitive, consumers' market, where the preponderance of interest and of influence is on the side of low prices. That the classes named are the chief sufferers from low markets, and the home and foreign consumers the beneficiaries, "goes without saying." This foreign dictation is therefore by no means an unmixed evil; in fact, those benefited are the great majority, and that there is no remedy is evident. *The surplus of exporting countries must always determine home values, and this surplus must be disposed of in the world's markets.*

Lack of space prevents the discussion in this article of the following topics: The merits and demerits of the method of trading in grain for future delivery as evidenced in its practical workings; some of the probable effects of the present system of publication of weekly and monthly governmental and state reports

(of more or less questionable accuracy) of the "conditions" of the growing crops from the time the seed is sown until the harvest is complete; the effects of the full information given to the "consuming world" of the actual quantities of grain in our storehouses, coupled with approximate estimates of the surplus left in producers' hands; and prominent features connected with the almost complete abolition of the at one time universal and centuries-old custom of the sale and purchase of grain and flour through commission merchants, or agents who have been supplanted by *principals*, with whom profit and loss, not commissions, are the reward.

The system of purchasing and selling grain for future delivery was introduced, if we recollect aright, in the latter part of the 60's. We recall, as if it were yesterday, the first transaction made on our Toledo Exchange; how, with "bated breath and startled ears," the members heard the offer and acceptance by the presidents of two national banks of a contract for the delivery of 5,000 bushels of wheat at a stated price during the following month. How little we then realized how familiar in a few short years—yes, it may be said in a few months—we would become with such really legitimate and lawful transactions; how widespread, in fact, universal, they would become, and what a momentous influence for the welfare of mankind they would exert on the commerce of the world.

The disastrous effects to this agricultural country of the late panic would have been intensified several fold by the enforced cash marketings from the crop of 1893 and from the immense wheat surpluses left over from the excessive crops of 1891 and 1892—which enforced marketings became imperative by reason of the impecunious condition of the farming community as a whole—had not the system of trading in grain for future delivery established speculatively higher future prices, which induced capitalists to assume and carry the burden of the large stocks in all our leading markets. Elevator proprietors and other moneyed men made equivalent cash purchases and future sales, which protected and benefited them, and to an immense degree protected and benefited the farming community, and, in fact, the whole country.

Radical abuses, such as grain "corners," undue speculation and its attendant evils, have been occasional and unavoidable accompaniments of this modern system, but these abuses form no basis for argument against the method itself.

The use or abuse of any factor for the good of mankind is simply man's treatment of God's gifts.

WANT DAMAGES FOR DELAY IN TRANSIT.

An action was commenced recently by Hotaling & Heffron, the jobbers in feed of Syracuse, N. Y., against the Indiana, Illinois & Iowa Railroad Company to recover \$368.46, the value of a carload of corn and the freight paid upon it.

In the spring of 1894 the plaintiffs purchased a carload of corn at Kankakee, Ill., to be shipped to Easton, Pa. It was shipped on the defendant's road, and was twenty-seven days in reaching its destination. The weather was warm, and the car was so long delayed that the corn was spoiled and was not accepted by the parties to whom it was shipped. The value of the corn was \$285.58, and the freight, which was paid in advance, was \$82.88.

The company admits that the car was delayed five days at one place, and negotiations of settlement have been pending, but could not be effected.

Four years ago, at the close of a harvest of unparalleled bounty, a circular was scattered broadcast through the West and Northwest advising the farmers not to market their grain, but to hold it for advanced prices. At that time wheat was at a higher price in the markets of the world than it has ever been since, and the result of the wheat holding was that the producers got less and less for their grain the longer they kept it. How unanimously the scheme was carried out no one can probably say, but that the circulars influenced many persons there is no doubt, and greatly to their loss. Like all such attempts to corner the market, it completely failed.

Queries and Replies.

Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.

No. 2. Address of Oat Shipper Wanted.—Will some reader of the AMERICAN ELEVATOR AND GRAIN TRADE give me the name and address of a reliable shipper of oats in Ohio or Indiana, so that I may communicate with him?—R. R. CORDNER, Middletown, Orange Co., N. Y.

DOUBTFUL CONCERNS.

There are parties in Chicago who are sending out cards, circulars, etc., with "Chicago Board of Trade," "New York Stock Exchange" and "New York Produce Exchange" printed thereon. The inference is that the parties are members of these organizations, but such is not the case, and in many instances they are firms of little or no financial standing whatever, who reorganize with any and every sharp turn of the market.—*Trade Bulletin, Chicago.*

SUPPLYING THE MARKET WITH WIND WHEAT.

"I see," remarked the wide-awake farmer to the commission man, "that wheat has gone up to 70 cents in Chicago, and there's a report that it will keep goin' till it gets to \$1. Now, I'd like to contract to sell you my crop for 70 cents. Seventy cents will do me. I'd rather have a sure thing while it's goin' than to take my chances on doin' better by waitin'."

"But," replied the commission merchant, "I can't agree to contract for your wheat at 70 cents."

"Why not? It's goin' up to \$1, an' you'll make 30 cents a bushel. Ain't that enough?"

"Oh, yes; but you see, that 70 cents is only a speculative price. It ain't what they pay for real wheat."

"Don't pay that for real wheat? What in thunder do they pay it for, then?"

"Why, for options."

"Well, what the blazes are options?"

"Why, they're promises to get wheat and sell it for such and such a price."

"Well, then, they got to get the wheat, ain't they?"

"No; they sell the promises again, according as the market rises or falls."

"An' don't they buy an' sell any real wheat at all?"

"Not much."

"Just buy an' sell wind at 70 cents a bushel?"

"That's about it."

"Thunder an' Mars, wish I'd knowed that last fall. I wouldn't a sowed any wheat I'd tied my grain bags to the back o' my fannin' mill an' kept the boy turnin' it all winter, till I'd filled all the bags I could get hold of. But it ain't too late yet. By gosh, if it's wind they want 'stead of wheat, I can supply the market for the hull country right off my farm!"

ENGLAND NEEDS AMERICAN ELEVATORS.

In a long article on the grading of grain, the *Mark Lane Express* of London insists upon the need of various reforms in England, in regard to the handling of grain in bulk, and dwells upon the superior methods employed in the United States. We quote:

"Grading, to be effectual, requires the actual gravity of the grain, as well as its size, to be understood by the user. It is too much to expect ordinary users to attend to what to the majority of them might appear to be a paltry and frivolous detail. As a fact, it is attended to as yet by so few that it may be almost correctly described as unknown. Yet the advantages are so obvious and so considerable, and the additional cost is so trifling, it should be a constant practice of all maltsters to grade in the most efficient manner. Assuming, however, that the cost of the necessary machinery is a considerable bar to the general adoption of any really efficient system of grading, this again further points to the need of concentration. Were elevators constructed in Britain on a somewhat similar plan to those so well known in America, but

adapted to our insular requirements, and if by their agency barleys were efficiently handled and graded, almost the whole of the defects and disadvantages of our native grain now complained of would at once disappear. A central, well equipped building, fitted with efficient machinery, would deal with the whole of the crops of a considerable district, and while the owners could pay growers a better price than they now receive, after defraying all costs and charges, the higher price they could secure for properly graded corn should yield a handsome return. The other advantages to the grower, maltster, brewer and beer drinker can be left to the imagination."

CHAFF.

The Lake Shore Railroad is building 500 grain cars of 60,000 pounds' capacity each.

Fire is still harvesting grain. A 10-acre field of wheat near Sioux Falls, S. D., was recently burned over.

Michigan millers are buying wheat in Chicago, even from sections where they had a fair crop, because the quality is so poor.

The South and West Trade and Grain Congress will be held at the Cotton States and International Exposition at Atlanta, Ga., on October 5, a special day having been set aside for that purpose.

In an action on a fire insurance policy, it is essential to the right of recovery that proof of loss be furnished according to the conditions of the policy, unless such conditions have been waived by the company.

Grain men in the wheat regions of California say that it looks like old times with 6, 8 and 10 horse wagon trains hauling wheat to market. Warehouses are being rapidly filled with sacked grain, and cars have become scarce.

Farmers of Charles Mix County have a project for the construction of a railroad by which they will ship their crops. The plan is, as recently formulated, to construct a line about 55 miles long crossing Charles Mix and Douglas counties to a point in Davison county.

Circular No. 90, announcing the Triennial Conclave of the Knights Templar at Boston, August 27, is a very interesting and artistic little brochure, which can be secured by addressing O. W. Ruggles, General Passenger and Ticket Agent, Monadnock Building, Chicago.

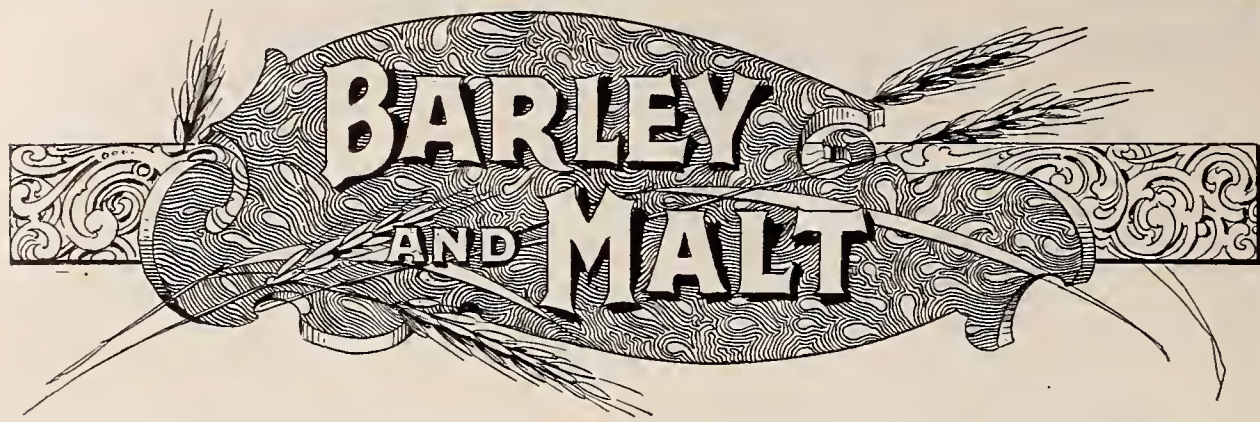
The Department of Agriculture at Washington has received samples of corn from Peru with grains four times the size of the ordinary kind. It is very prolific and bears very large ears. The species is distinct from any known in North America and the name "teamaylacea" has been given to it.

There is one farmer who has an established confidence in one elevator man. He took a wagonload of oats to T. McGill & Co.'s elevator at Watseka, Ill., and he swore by all green growth that he had in his wagon 80 bushels by actual measure. Mr. McGill convinced him that he had 97½ bushels.

Judge Bartlett of the Supreme Court at Brooklyn, N. Y., recently decided that Mr. Belden was correct in detracting from the amount paid the receiver of the Union Warehouse Company for its leases the \$6,000 due the Atlantic Storage Company for loss and shrinkage of the wheat stored there under contract with the Union Warehouse Company.

Oats in warehouses have to be looked after and turned over, or they may get red hot. A lot of about 2,000 bushels was recently turned once, and the shrinkage on it was 26 bushels, or 13 bushels per 1,000, whereas the usual allowance for shrinkage is four bushels.—*Trade Bulletin, Montreal.* The turner's chickens must have been very hungry.

Alonzo J. Whiteman, who was a plunger in wheat at Duluth in 1886 and lost about \$1,000,000, and who was also the youngest member of the Minnesota Senate that year, has been convicted at San Francisco, Cal., of forging the name of Frank Dixon of Chicago to a draft for \$500. He made a most eloquent plea in his own behalf and will be granted a new trial by showing that there is a Dixon and that he signed the draft.



There is a project for a new brewery at Lockport, N. Y.

Fritz & Cook have a new brewery at Westphalia, Mich.

Andrew Liden has erected a new brewery at Minneapolis.

John C. Werner has erected a new brewery at Johnsville, Cal.

The old Morris Brewery at Philadelphia is being torn down.

A new brewery may be erected at Batavia, N. Y., by Buffalo parties.

C. H. Schwerdfeger will erect a large brewhouse at Philadelphia, Pa.

The new Cold Spring Brewery at Lawrence, Mass., is now in operation.

Stehlin & Breittkoff, brewers of Brooklyn, N. Y., have a new brewery.

The Eagle Rock Brewery has commenced business at Idaho Falls, Idaho.

Albert H. Harris' new brewery at Brooklyn, N. Y., was recently completed.

John Zynda of Detroit, Mich., will build a \$75,000 brewery at Toledo, Ohio.

Jas. O. Cole, brewer of Peru, Ind., will erect a brewhouse, storage house, etc.

Julius Binz is remodeling his malt house at Buffalo, N. Y., at a cost of \$15,000.

The Muhlenberg Brewing Company has established a new plant at Reading, Pa.

Frank Bartl, brewer of La Crosse, Wis., will erect a new brewery to cost \$20,000.

The Wheatland Brewing Company has been incorporated at Wheatland, Minn.

The McKeesport (Pa.) Brewing Company will soon begin the erection of a plant.

Lucy E. Rall has succeeded to C. E. Rall's brewing business at Steubenville, Ohio.

It is said that Chicago and Pittsburg parties will erect a brewery at Du Bois, Pa.

Em'l Volbrecht has bought out Peter Arbes' brewing business at Le Sueur, Minn.

The Kewaunee Brewing Company has completed a new brewery at Kewaunee, Wis.

F. X. Rieger, brewer of Conshohocken, Pa., has been succeeded by Louise Rieger.

Hand & Van Dyke will remodel a factory building at Scranton, Pa., into a brewery.

Wittman & Hoffman contemplate erecting a brewery near Prince Albert, Sask.

The Harper's Ferry Brewing Company of Harper's Ferry, W. Va., has a new brewery.

Casper Hermann has succeeded K. N. Kraft in the brewing business at Bluffton, Ohio.

The Henning Brewing Company has succeeded C. Henning & Sons at Mendota, Ill.

The Consumers' Brewing Company of Scranton, Pa., will erect additions to its plant.

Receivers have been appointed for the Fred Hower Brewing Company of Brooklyn, N. Y.

A brewhouse is being erected at Elizabeth, N. J., for the Rising Sun Brewing Company.

Helf & Brill's brewery at Kaukauna, Wis., was burned July 31. Loss \$6,000; insured.

The drying of distilled grain in the form of cakes, similar to linseed and cottonseed cake, is now prac-

ticed. It sells for \$19 at the distillery, while in Europe it advances to \$28 per ton.

The Sioux Falls (S. D.) Brewing Company is erecting an elevator 40x80 feet in size.

Expensive repairs are being completed at the Clyde (N. Y.) Malting Company's malt house.

A brewery syndicate is making preparations for the erection of a malt house at Carlton, N. Y.

Moritz Weidmaer has succeeded to Otto Voigt's brewing business at Gloucester City, N. J.

Robert Graupner, brewer of Harrisburg, Pa., is erecting a brewery which will cost \$25,000.

It is reported that Frank Hansel has purchased Benishek & Sisch's brewery at Antigo, Wis.

Herman Goepper, receiver, has succeeded the Foss-Schneider Brewing Company of Cincinnati, Ohio.

The Crown Brewing Company has erected a plant at Crown Point, Ind., and is now carrying on business.

August Harkung's brewery at Honesdale, Pa., burned July 30, at a loss of \$50,000; insurance \$16,000.

Howard Thornton has been appointed receiver of the Beveridge Brewing Company of Newburg, N. Y.

The Kalispel Malting and Brewing Company of Kalispel, Mont., will erect a malt house to cost \$10,000.

Wm. McMeekin's City Brewery at Prineville, Ore., which was burned a short time ago, is being rebuilt.

The Polish-Lithuanian Brewing Company will carry on the business of Kurzeja & Tobolewski at Danville, Pa.

J. M. Enzbrenner's Empire Brewery at Altoona, Pa., was burned recently at a loss of \$3,000; insurance \$1,000.

Mrs. Sophia Jacobs of Uniontown, Wash., has succeeded to the brewing interests of Peter Jacobs, deceased.

R. O. Porak's brewery at Sprague, Wash., was burned August 11 in a general conflagration. Loss \$10,000.

The Irving Cliff Brewery at Honesdale, Pa., was destroyed by fire July 30. Loss \$50,000; insurance \$22,000.

The Milwaukee Brewing Company has been incorporated at San Francisco, Cal., with a capital stock of \$100,000.

F. A. Valk has bought the malting plant of M. H. Golden & Co. at Pekin, Ill., the old firm having dissolved.

The Quant Brewing Company of Troy, N. Y., will make extensive additions to its equipment and erect a storage house, etc.

The Eagle Brewing Company is making extensive additions to its plant at Providence, R. I., including storage house, etc.

The Union Brewing Company of Cleveland, Ohio, has succeeded to J. H. Schneider's brewery, which was in the hands of a receiver.

The German-American Brewing Company has commenced work on its new brewery at Buffalo, N. Y., which will be completed this fall.

The business of the Huntington Brewing Company of Central City, W. Va., will be carried on by W. R. Thompson and C. W. Campbell.

Charles M. Warner of Syracuse, N. Y., who controls malt houses having a total capacity of 2,000,000 bushels, is erecting a malt house, to be operated on a sys-

tem that is partly his own invention. It will have a capacity of 3,000 to 4,000 bushels per day.

Fire was discovered recently in the warehouse of Marx Bros' brewery at Wyandotte, Mich., but was extinguished before much damage was done.

The Buckeye Brewery at Toledo, Ohio, recently sustained damage by fire amounting to \$12,000; insured. The fire started in a chimney in the boiler room.

Weber & Wolfarth will carry on the business of the National Brewing Company of Saginaw, Mich., John Hubinger retiring from the firm of Hubinger, Weber & Co.

The John Stanton Brewing and Malting Company has been incorporated at Troy, N. Y., with a capital stock of \$300,000. John Stanton, W. P. Stanton and E. F. Stanton are the directors.

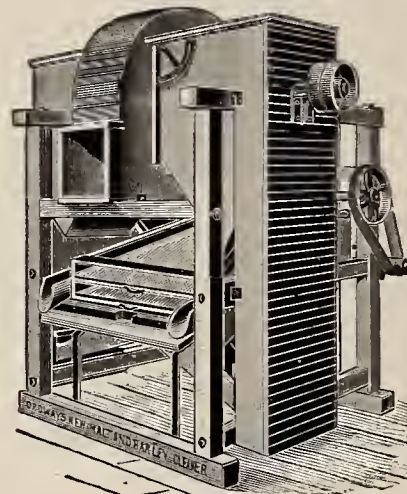
The Wisconsin Malt and Grain Company of Appleton, Wis., is erecting an elevator of 250,000 bushels' capacity in place of the one recently destroyed by fire. The contract was let to Henry Hoffman.

It is proposed to investigate as to the wholesomeness of the feed turned out by Ohio breweries. Cincinnati brewers appointed a committee which went to Columbus to consult with the State Dairy and Food Commissioner.

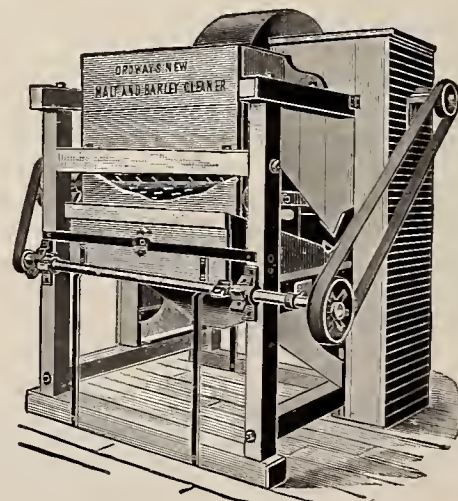
Barley malt aggregating 11,069 bushels, valued at \$7,495, was imported during the twelve months ending June 30, against 5,010 bushels, valued at \$5,676, imported during the corresponding time ending with June preceding.

A COMBINED BARLEY AND MALT CLEANER.

The necessity for a cheap and at the same time a practical barley cleaner and polisher combined, one that would thoroughly do the work and not break or injure the kernel, has existed for a long time. Some



barley merchants and elevator owners have used smutters and scouring machines for the purpose of polishing the berry and removing the dark and dirty yellowish color. The illustrations given herewith represent the front and back view of Ordway's New



Barley and Malt Cleaner and Polisher and Degerminator.

The manufacturers of this machine have been in the grain elevator and brewery building business for a number of years, and after repeated trials and experiments they have brought out a machine that is claimed to be perfect in its operation, durable in construction, and low enough in price to come within reach of every

man who deals in barley or malt, or owns or runs an elevator.

The operation of the machine is very simple. The grain is fed into a large receiving hopper on top of the machine on the back side. Near the bottom of this hopper on the inside of it is a chilled iron cylinder revolving between two smooth concaves, one on each side of it; this cylinder runs the whole length of the hopper and has from five to eight rows of round flights in it running lengthways from end to end spirally around the cylinder. Each alternate row conveys in an opposite direction from the other. This cylinder revolves at a moderate speed and stands directly over the feeding shoe at the back end of the shaker. The shoe forms the bottom of the hopper with a slide in the front side to feed the grain onto the shaker screens. As soon as the grain is let into the hopper it fills up and this revolving cylinder being at the bottom of the hopper receives the pressure of the hopper full of grain. The spiral rows of flights conveying in opposite directions to each other cause the grain to travel back and forward as it passes down between the cylinder and concaves onto the shaking screen, thereby forcing the kernels one against the other so many times

without the polisher. By removing the polisher when not needed and changing sieves it makes a warehouse receiving separator.

The bearings are all babbitt metal, all fireproof and in sight. The machine is well built, strong and durable. Any additional information can be secured by addressing A. F. Ordway & Sons, Beaver Dam, Wis.

THE DORNFELD SYSTEM OF PNEUMATIC MALTING.

Pneumatic malting, although in its infancy in this country, has already gained sufficient foothold to demonstrate its value, and it is claimed by its friends that it is only a question of time when it will be generally adopted. It is said that by the pneumatic system the cost of production is reduced to less than one-half the cost by the floor system. The Dornfeld pneumatic malting machinery and apparatus is of steel and iron, which with the floor of the building is but little more than one-half the weight of the germinating grain. This permits old houses being changed to this system without change of building.

The cut given herewith is a view of a longitudinal section of a four-story germinating house, with steel

kind of air is confined within such flues and channels, and is not affected by the atmosphere of any season, nor causes unpleasant and unhealthy dampness within such malting rooms. The air in the malting rooms is pure and sweet; the fumes, gas and heat extracted from the germinating malt by the downward ventilation are at once confined in the space underneath the perforated floor. The compartment walls are constructed of cast-iron frames, to which the rails for the travel of the malt turner are bolted, as other fixtures, end niches, etc., forming in itself a complete structure, when it is filled in by a 4-inch tile or brick, and cement plastered.

The air attemperating and purifying apparatus used in this system is simple in construction, of large capacity for a given space, and can easily be cleaned while in operation. It is furnished in such capacities that the air passes slowly through the continuous contact of metal and atomized water, and is perfectly cleaned and reduced to any desired temperature, and impregnated with moisture to the limit of that capacity. The germinating grain is stirred and turned by a machine receiving power from a shaft by a rope, and propelled over the germinating grain on wheels, traveling on the rails of the compartment walls, and the depending malt stirrers reaching from the body of the machine to within $\frac{3}{4}$ inch of the perforated floor. The malt stirrers are of a new design, and perform the work with precision, and without injuring a single grain. Each stirrer is provided with a flexible brush that gently stirs up the kernels directly on the floor to mix and ascend with the other. The body of the machine is built of steel, and its entire gearing arrangement is of the simplest kind. Mr. Dornfeld claims that any kiln should be of square form as nearly as possible: the distance from the fire to the first floor to be of efficient height, and in proportion to the size of the kiln. The outside walls to be made as tight as possible. The Dornfeld patent system of malting is particularly adapted for the trade where elevator men choose to enter into such business, since it requires less attention to operate than any other system, while it is perfectly automatic and under control of the operator.

FLAXSEED AT CHICAGO.

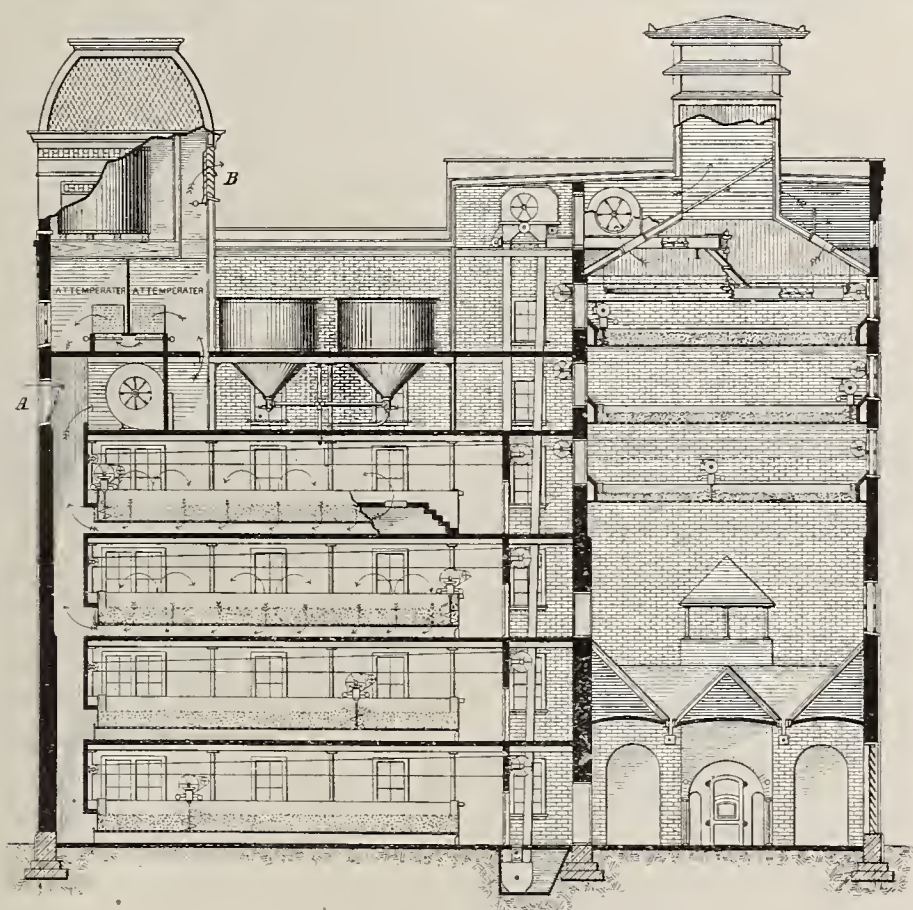
The receipts and shipments of flaxseed at Chicago during the 24 months ending with July, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1894-95.	1893-94.	1894-95.	1893-94.
August.....	1,306,250	414,700	429,373	341,609
September.....	751,300	1,881,550	375,713	1,195,733
October.....	801,350	2,340,800	351,833	1,810,110
November.....	426,800	1,175,650	143,733	887,708
December.....	459,962	493,900	111,931	383,932
January.....	92,950	183,700	70,016	186,674
February.....	85,800	59,400	105,912	142,645
March.....	75,900	44,000	64,456	92,050
April.....	52,250	129,464	49,545	60,423
May.....	88,000	128,269	196,801	72,463
June.....	86,900	48,400	37,865	73,607
July.....	114,950	190,850	33,379	38,547
Total.....	4,342,412	7,093,683	1,970,557	5,285,498

The receipts at Chicago of flaxseed of the crop of 1894 from Aug. 1, 1894, to July 31, 1895, according to Inspector S. H. Stevens, were as follows: By railroad, No. 1, 3,309,900 bushels, Rejected, 918,500, No Grade, 60,500; by lake, 53,512 bushels, making a total of 4,342,412 bushels. Shipments during the same period were: By railroad, No. 1, 833,533 bushels, Rejected, 92,711 bushels, no No Grade; by lake, No. 1, 642,629 bushels, Rejected, 1,314 bushels; in through cars, 345,400 bushels, non-inspected cars, 4,950 bushels, making a total of 1,970,557 bushels.

The wheat dealers of this place will not furnish sacks to farmers during thrashing, and we have a new business, a sack exchange, where the farmer can rent his sacks for a small amount.—*News, Owensville, Ind.*

When the seller has made a false representation, which, from its nature, might induce a buyer to enter into the contract on the faith of it, it will be inferred that the buyer was induced by it to make the contract, and it is not necessary for him to show that he in fact relied on the representation.



THE DORNFELD SYSTEM OF PNEUMATIC MALTING.

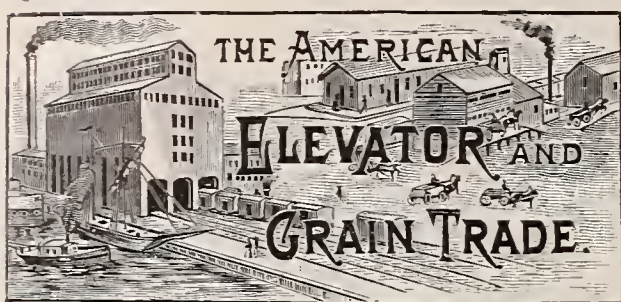
before they reach the shaker that they become thoroughly polished and scoured. The maker claims that it does not break or injure the kernel in the least, but removes every impurity from the outside of the berry and makes it bright and clean, and raises the grade.

The machine is also said to be a good malt cleaner and degerminator. The scouring cylinder being constructed with a less number of rows of flights and run at a slower speed, being run just fast enough to degerminate the kernels without injuring them, it is said to be a perfect degerminator. After the grain has passed through the polisher it drops onto a shaker having three or more screens, one of them a fine cockle sieve, the others perforated the right size to remove all straws, sticks and other foreign matter from the grain. After passing through and over the screens it drops into two air trunks, one on each side of the machine, where it meets a strong upward current of air which lifts out all fine screenings, and as much of the light barley as is desired to take out. The grain passes out of these air trunks clean. The screenings are drawn into the separating chamber, where they are separated from the dust and dropped out of the discharge spout. The dust is drawn into the fan and blown into the dust room or out of the building as is desired. The screen sieves to this machine are adjustable and can be changed to a fine or coarse one at pleasure. The machine has two long suction air trunks the whole height of the machine which give it large cleaning capacity.

It is a combined machine and can be used with or

tanks and air purifying and attemperating apparatus above, and a malt kiln to the right, with the Dornfeld patent kiln turners. The barley is steeped in the ordinary way and spouted with the last steep water down to the compartment, where it is distributed with a short hose. The steep water drains through the perforated floor and passes off to the sewer. As the grain germinates it generates heat and carbonic acid gas. At a certain degree of temperature this heat and carbonic acid gas are drawn from the grain in a downward direction (see arrows), passing through the open gate at the back end of the compartment, and up in flues to the exhaust fan, which discharges the air into a distributing and attemperator room, where it is held under a slight pressure by a self-regulating valve at B. This air under pressure will pass through the purifying and attemperating apparatus and down in adjoining flues into the channels on each side or between the compartments. The channels have top openings with covers for regulating the current and quantity of air as it passes out and over the malt, where the suction from below, as before stated, draws it down. The automatic pressure and relief valve at B can be adjusted so as to have either a slight vacuum or pressure in the compartment rooms, to suit the exterior atmosphere and humidity in the rooms.

It will be noted that each compartment has a large exhaust flue and two supply flues with communicating channels on both sides. The cool, moist air descends and the warm exhaust air ascends, and either



PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

MITCHELL BROS. COMPANY

(INCORPORATED.)

OFFICE:

Howland Block, 184 and 186 Dearborn St.,
CHICAGO, ILL.

Subscription Price, - - - - \$1.00 per Year.

English and Foreign Subscription, - - - 1.50 " "

English and Foreign Subscriptions may be sent to W. H. Smith & Son, 186 Strand, London, W. C., Eng.

A. J. MITCHELL, - - - Business Manager.

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CHARLES S. CLARK, - Assistant Editor.

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., AUGUST 15, 1895.

DELAYING GRAIN SHIPMENTS.

The rail carriers have not built many new grain cars during the last two years, and the traffic managers are trying to encourage the Western grain shippers with visions of an immense business by predicting a car famine and blockade. Shippers who suffered heavy losses from this cause several years ago still have painful recollections of shipments delayed in transit and at initial point for weeks and months. They remember the grain that heated in transit, the loss occasioned by the decline of the market and the interest paid on the money kept tied up in the grain. They remember how persistently they had to fight to get their grain into cars and then to get them delivered at destination. The thought of a return of this condition is anything but a pleasant one.

With a car famine upon us there will be another struggle to settle those old questions, "How Can Cars be Distributed Equitably?" and "Should the Demurrage Charge be Abolished or Made Reciprocal?"

It is still maintained by some prominent shippers and with considerable show of reason that the supply of cars should be distributed among the applicants in proportion to their applications and preference should be shown those whose orders for cars are more than a week old. Such a rule would be as fair and just as any which could be enforced, except one requiring the carrier to pay shippers the same fee for delaying a carload of freight in excess of 48 hours that it charges shippers for delaying cars. The payment of such a fee would also settle the second question. The receiver who had six different shipments delayed one to four weeks in transit and delivered in a bunch on the last day of the month will never forget how he fought against paying demurrage because he could not dispose of all of those delayed shipments within the prescribed 48 hours. In such a case a reciprocal demurrage charge would have deprived the

receiver of an opportunity to complain against payment.

The demurrage charge is in reality a penalty for non-fulfillment of contract. When the carrier lets out its cars it does so with the understanding that they will not be delayed at point of shipment or destination beyond 48 hours, and when they are it levies this charge upon the offender. By its time card and common practice the carrier is duty bound to transport the grain to destination within a reasonable time. When it does not, it is the offender and should be required to pay a penalty for breaking the contract. The demurrage charge as now levied is ostensibly for the purpose of keeping the cars moving and increasing the carrying capacity of the carrier, but in reality it is for the purpose of increasing the income of the carrier. If carriers were guided by a sincere desire to keep business moving they would of their own accord establish a demurrage charge for the delay of freight in transit.

THE GRAIN TRADE OBSTRUCTIONISTS.

The Board of Directors of the Chicago Board of Trade have for good and sufficient reasons refused to make eight elevators regular, and the proprietors of these houses, which have a combined capacity of 5,000,000 bushels, have charged the directors with being prompted by all kinds of selfish and unfair motives in taking this stand. They have been waving the red flag and running up and down the street to get themselves interviewed about the threatened destruction of Chicago's grain trade, but they have said not a word about modern methods of keeping a regular elevator crammed full of grain so as to collect storage charges for every inch of space throughout the entire year.

These modern trade blockaders have kept up such a racket since they learned that their houses which are full of grain would not be made regular that the secular press, which never goes very deeply into anything, has not discovered the real cause of the trouble and is disposed to champion the cause of the elevator men.

For many months these elevators have been kept full of grain by a system of trade juggling on the part of the proprietors, who have continually dealt actively in grain but have seldom made a sale for immediate delivery. Their first and last aim is to make a profit out of grain by storing it, but when a shipper wanted wheat real badly these pirates have at times permitted a little to go out upon the payment of a premium of 2 to 3 cents by the shipper. These obstructionists have aimed to get the wheat here and keep it. They long since lost sight of the true duties of a public warehouseman, and after convincing themselves by selfish arguments that it is all right for a bailee to deal in the property intrusted to his care they have had the audacity to attempt to convince the bailor that it was all right and would in no way inure to his detriment.

Now that their houses are irregular they shrewdly make no reference to this irregular practice, because they hope to have their houses again made regular without agreeing to refrain from dealing in grain stored in their own houses, as all public elevator men should be required to do.

The Warehouse Committee of the Board of Directors reported these elevators full and unavailable. If they had some room to spare they might be considered available, but even then the Board of Directors would not be duty bound to make them regular, and if they rightly considered the interests of the city's wheat trade they would not make these elevators regular until the proprietors pledged themselves not to deal in grain contained therein. Some time ago there were doubts in the minds of many dealers as to the marketable condition of the wheat in some of the public elevators of Chicago. A

committee was appointed to examine it and some of the elevator men objected, so no examination was made. It would be better for the trade if all the old wheat was cleaned out of the public elevators every year. As the public elevator business has been conducted this has not been done, and some of the elevators have been credited with containing wheat three and four years old.

THE MAN-WITH-A-SCOOP.

The time is now at hand when the irregular dealer with an office in his hat and an elevator over his shoulder will go about the country making business miserable for the regular elevator man, who pays all kinds of taxes to help support the local institutions.

The regular elevator man keeps his house open the year round and maintains a market for the farmers' grain, much to the advantage and profit of the local merchants. He employs labor and helps support local enterprises with subscriptions and personal aid. He is a citizen of the town in which he buys grain, and as such he is entitled to the support of the citizens and the protection of the local government against the traveling vultures who sweep down upon his business when it is at its best. The other merchants are generally given protection against the transient storekeepers who go about the land with a bankrupt's stock of worthless stuff and against traveling peddlers by the town's charging transients a heavy license fee for the privilege of doing business within its limits. Surely no one will deny that the merchants are entitled to this protection, and the town by levying the tax protects its citizens from the trickery of the worst of this class of vultures.

Few towns have made any effort to protect its grain merchants or the farmers who bring their grain to that market from the irresponsible tricksters who jump about the country buying wherever they find the grain coming to market. A tax upon these irregular buyers would not be unfair and would render a long-delayed justice to the regular grain dealer who does much to build up the town in which he resides.

MISDIRECTED EFFORTS OF THE ERIE BOATMEN.

The Erie canal boatmen are again waving the danger signal over the stagnant remains of the Erie canal, but in their enthusiasm and excitement they have lost sight of their real needs. They now propose to have the charters of the railroads which compete with the canal revert to the people of the state. This hue and cry may attract some attention, but it will not be the means of securing any assistance. It will confuse the canal's sympathizers and do the cause more harm than good.

Western grain shippers are interested directly in the maintenance and improvement of the canal and they want the transfer charges at each of the New York terminals reduced to a reasonable figure. The $\frac{1}{2}$ of a cent charged is extortionate and illegal. New York and Buffalo are also interested in having the trade treated fairly, for if it is not the St. Lawrence route will eventually get the bulk of it. The railroad-elevator pool cannot always charge exorbitant prices for taking grain from lake vessels to New York.

If the misdirected energy of the canal boatmen had a vigorous and intelligent director with means at his command they could accomplish much more than they have. Their aimless floundering has resulted in no practical advantage to the canal as yet. The fight of the independent floating elevators at Buffalo last summer did more to advance the canal's business than anything that has been done, and what is more it came very near exterminating the pool. Two first-class floating elevators at Buffalo by transferring grain at a reasonable price would do

more to help the boatmen than the expenditure of \$2,000,000 on the canal. The boatmen need something to place them on an equal footing with the rail carriers. When this has been done they will carry a good portion of the grain regardless of the fact that they have to drag their boats through slime and short locks.

A WARNING AGAINST BUCKET SHOPS.

Recently we have received a number of inquiries from persons in different parts of the country asking about the reliability of firms claiming to do a commission business in Chicago, and some have sent us a copy of the advertisement which prompted them to make the inquiry. In each case the advertisement bore unmistakable marks of the rankest fraud, and a person with any business experience would not think of asking regarding the reliability of the advertiser.

Those who have written to us for information have invariably been men who worked in or about a mill or elevator and put their hands in grain now and then. This familiarity begets confidence, and a couple readings of the bucket-shop advertisement prompts them to place their money or write for information. Those who have written to us have not speculated, or at least we sincerely hope they did not.

One of the advertisements sent us proclaims in large type, "Big profits on small investments. \$10.00 for each dollar invested can be made by our systematic plan of speculation. Our plan does not risk the whole amount invested on any trade, but covers both sides, so that whether the market rises or falls, it brings a steady profit that piles up enormously in a short time."

What a curiosity the advertiser would be if he discovered such an impossible plan and then gave it away to the countrymen for a pittance. What fools are they who credit his statements.

The knaves have no business standing; they rent a desk or a room and place advertisements direct with country newspapers at a distance and never pay for the advertising. Some of them are printing the names of commercial exchanges on their stationery so as to give their correspondents the idea that they are members. Correspondence with the secretary of that exchange will bring a prompt reply to the contrary.

The members of a commercial exchange should advertise their membership and in support of that exchange and the cause of the trade all legitimate traders should positively refuse to advertise in any publication which accepts advertisements from bucket-shop keepers. By so doing they lower their own business standing by permitting the association of their names with rascals, and this association gives strangers the idea that the irresponsible bucket-shop keepers have standing in the trade. We trust our readers will use every opportunity to warn their employes against trading with these sharks, who would not give up a profit even if the investor had one.

THE Minnesota Railroad and Warehouse Commission held its annual meeting recently in St. Paul for the establishment of grades. As no one appeared to ask for a change or petitioned for same by letter the grades and rules governing inspection last year were readopted. Neither was any change made in the charges for weighing or inspecting grain. The fees now in force are as follows: For inspection on arrival, 25 cents per carload on all receipts excepting flaxseed, the fee for the latter being 75 cents per carload; for inspection out of store, 25 cents per carload and 50 cents per 1,000 bushels to vessels, on all grain excepting flaxseed, the fees for the latter being 75 cents per carload and \$1 per 1,000 to vessels. The fees for weighing are 25 cents per carload and 50 cents per 1,000 to vessels on all grain, including flaxseed, either on arrival or out of store.

BILL OF LADING RATES NOT ALWAYS VALID.

Grain shippers who have always depended on the local freight agent for the rate on their grain and trusted in the bill of lading to hold the carrier to the contract rate, will be shocked when first they feel the full force of the recent decision of the United States Supreme Court, in which it is held that the established rate which is printed and posted at every station is the only legal rate, hence the only one which can be collected.

Shippers who do not heed the rate schedule posted in their station and depend upon the agent for the rate may be surprised by having their shipment confiscated for freight charges. This applies, of course, to interstate commerce only. Some of the states have laws prohibiting the collection of any rate in excess of the rate named in the bill of lading, and ordinarily this would seem just and fair.

The prevailing principle in all law relating to contracts is that each party to the contract shall be required to live up to the word and spirit of the contract, providing it is a lawful contract, and that error on the part of one party shall not be corrected to the injury of the other party. It seems right and fair that those who make errors should stand the brunt of them.

In the past it has seemed right and fair that carriers should charge no more than the rate named in the bill of lading. Decisions have been rendered to this effect and amended to except all cases where it was shown that the freight agent knowingly quoted a rate lower than the legally published tariff. In other words a contract made to convey freight at a rate below the schedule rate would be sustained when it was shown to be an honest error, but would be set aside and the legal rate charged when it was shown that the schedule rate was knowingly ignored. The number of these honest errors has not been great, but they have been numerous enough to cause shippers considerable trouble. In some cases the freight at the schedule rate would have amounted to much more than the value of the goods, and had that rate been quoted the owner would not have shipped them. We received a complaint recently from an Illinois dealer who after getting a rate from the general traffic manager, shipped grain West to an interior point and was charged \$8 a car more than the rate quoted. If the correct rate had been quoted to him he would not have made the shipment. By trickery or an honest error on the part of the traffic manager he was lured into shipping grain at a loss, and the Supreme Court of the United States now holds that in such a case the suffering shipper has no recourse.

The only way for shippers to secure the correct schedule rate—the only rate which will stand in the courts—is to consult the tariff sheets posted in the local freight office. On shipments made under a joint tariff the rates given in the lawfully posted schedules are the only lawful rates. All other rates are unlawful and hence contracts made at such rates are also unlawful and invalid. In order to make the rates to all shippers uniform and to prevent discrimination, a thing very much desired by all who are not guided by selfish motives, it is absolutely necessary that a lawful rate be established. The carriers are required to post a schedule of these lawful rates so that any shipper may learn the correct rate. Ignorance, as in the case of all law, will excuse no man, those who break laws must suffer the penalty. If you want the correct rates consult the schedule at point of shipment; if it is not given make complaint to the Interstate Commerce Commission.

This is the lawful status of the shipping business and the position the courts seem to be disposed to maintain, but the carriers look upon the law as a part of a comical farce; they heed or ignore it as their interests demand and most of the regular large shippers of the country pay little attention to it. The public and the Inter-

state Commerce Commission long ago became completely disgusted with the law, but the experience will prove valuable in that we will learn what is necessary to enable the government to regulate common carriers and prevent the rank discrimination between persons and places which are now made and have been made continually since the law went into effect.

ANOTHER HOLD-YOUR-WHEAT CIRCULAR.

Another sensational hold-your-wheat circular has been distributed throughout the Northwest purporting to be issued by the Triple Alliance at Minneapolis and for a time it created something of a stir among the sensationalists. Business men have accepted it only as a weak effort to scare the wheat speculators. The circular was not shrewdly written or distributed and it cannot be expected to have any effect on the farmers or the market.

The wheat producers of the Northwest had an expensive experience with a circular of this kind several years ago. They tied up to it and found out much to their sorrow that the circular cut 20 per cent. off of the price of their wheat.

IGNORING THE COUNTRY BUYER.

During the last few years several grain commission firms have seen fit to ignore the regular grain dealers established at country stations and have made strenuous efforts to undermine the business of these dealers and buy direct from the farmers. This journal has naturally opposed any such action, because the business is conducted with the least discord and more economically by the different ones connected with the trade sticking to their own branch of the business; in fairness and justice to those connected with the other branches they must do so. Any encroachment by the members of one branch upon the business of those engaged in another branch will naturally be resented, and those injured will naturally reciprocate.

We have just received the following from a prominent Illinois shipper:

At the last meeting of the Illinois Grain Dealers' Association at Decatur, resolutions were passed in regard to the irregular methods of buying grain of farmers, and of irregular dealings by the firm of L. Everingham & Co. of Chicago. Now these people utterly ignore the action taken by the dealers of the state of Illinois, and still persist in buying of whom they choose and have agents riding over the country and upsetting the legitimate dealers' territory without benefiting themselves in any way, shape or manner. It seems to us that there should be some manner in which to deal with parties who have no respect for themselves or for the rights of other dealers. Is there anything which you could suggest? Such firms as Carr & Co., Kenzie & Co., and others of a similar stripe seem to have crawled into their holes. This point must be settled or the Association will not stand, as it is of vital importance, any suggestions would be thankfully received and appreciated.

When a commission man encroaches upon the business of one or more country dealers, he must expect them to join hands and do everything in their power to induce their brother dealers at other points to cease shipping to him. Their common interests prompt them to do so and it is the most effective way they have of discouraging commission men from interfering with their business.

A GRAND jury at Chicago has returned nine indictments against bucket-shop keepers and it is expected they will be shut up, as they all ought to be.

A PROMINENT farmer of California and the president of the Virginia State Grange have been visiting some of the principal Eastern cities in the interests of an export bounty on all staple agricultural products. A very plausible scheme, but it will never be adopted. If it were, other exporters would also want a bounty.

EDITORIAL MENTION

CHEAPER CORN will mean a lower freight rate to move it.

COOPER well your cars and reduce the chances for shortages.

MARK the net weight of your grain on two cards and nail them on the side doors of the car.

WE will not knowingly publish the advertisement of a bucket-shop keeper or an irresponsible dealer.

PACIFIC COAST farmers have been remarkably successful in securing a reduction of grain freight rates.

A GRAIN buyer can avoid many expensive errors and much save time that would otherwise be lost in making computations, by using Davis' Grain Tables.

IT is predicted that we will have corn to burn, but this will not be realized on this crop unless something is done to stop the hot winds and the sun from burning it up before it matures.

DO NOT accept old, worn-out cars for the transportation of your grain to market. The law requires carriers to provide cars in good condition and to give shipper a clean bill of lading.

THE use of the cental of 100 pounds as the standard unit of measure for grain would greatly facilitate the business and reduce the number of errors made. No reductions to bushels would be necessary.

NOW that Minnesota farmers have taken to growing corn and have prospects for a crop nearly equal to their wheat crop the farmers of the great corn raising state of Iowa will have to pay more attention to wheat growing.

GRAIN dealers should be very careful about placing their orders with parties who are strangers to them. Those trading on the Chicago market will do well to heed the warning of the Secretary of the Chicago Board of Trade published in this number.

THE Secretary of Agriculture has issued an order abolishing the Free Seed Bureau to take effect October 1, and thereafter there will be no seeds purchased for gratuitous promiscuous distribution. Many abuses had grown up with the Bureau and no practical results attained.

FLORIDA is ambitious to become a rice producing state and the acreage is gradually being increased. In some districts of the state a yield of 50 bushels an acre has been secured. With thousands of acres of such land unutilized it seems folly for the United States to import large quantities of rice every year.

THE grain receivers of Milwaukee have found that it does not pay to cut the profit out of business in order to get it and have agreed to maintain the rates of commission established by the Chamber of Commerce. The commissions are 1 cent a bushel for wheat, barley and rye, $\frac{1}{2}$ cent for oats and corn and 1 per cent. of the value of seeds. This agreement was reached at a recent

meeting of the receivers to devise some means to stop the cutting of commissions, and that meeting may result in the organization of a receivers' and shippers' association. Such an organization could surely find plenty to do and be a source of profit to the members.

NONE of the Western lines now are expected to abide by the order of the Classification Committee of the Western Traffic Association which reduced the minimum weight for carloads of about 100 articles. The C., M. & St. P. Ry. asked a reduction on 400 commodities and this company as well as the Northwestern and the Burlington will make a number of reductions.

SEVERAL elevator men have given their new elevators a good start by offering \$1 a bushel for the first load of new wheat marketed at the house. In every case the offer has been instrumental in materially increasing their receipts. The operators of some old houses have also made similar offers through their local newspapers with good results. It makes the farmers talk about the elevator man and they advertise his business thoroughly.

THE visible supply of wheat will experience a material shrinkage when the wheat in the irregular elevators is no longer included in the reports. The wheat in the private or irregular houses could easily be transferred to the regular houses on short notice and made to appear in the visible supply, so that in justice to the trade it would seem right that all grain in private elevators at central markets should be given in a supplementary report.

THE Cincinnati Chamber of Commerce has established a new grade for wheat to be known as No. 4 Red Winter Wheat. It shall be sound, but not good enough to grade No. 3 and shall test not less than 53 pounds to the bushel. As the Ohio law prohibits the use of testers at country points the country buyers will have to guess at the grade of wheat, and in order to be on the safe side they would be justified in grading it all No. 4. This might bring the farmers to their senses.

INDIANA seedsmen are making a vigorous fight against the injustice they claim to suffer at the hands of the freight classification committees. A carload of sacked seed is put in the fifth class and less than a carload in the third class, while the grain shipper's bulk grain goes as fifth class if less than a carload and sixth class if a carload. The seedsmen seem to have forgotten that the carrier is put to no expense for loading or unloading bulk grain and then, too, the traffic will not stand so much.

MILLERS of several districts of the winter wheat belt who in former years have suffered loss by reason of wheat being marketed before it was properly cured issued notices this year warning farmers to leave their wheat in the shock or the stack until it is thoroughly dry. If grain buyers would discriminate more vigorously against grain not properly prepared for market the farmers would take more pains with it. The trouble is the trade is afflicted with a number of buyers who give little heed to quality.

REPORTS from the Northwest indicate that there is a good deal of foreign seed in the wheat and in some districts smut exists. This is significant to the grain cleaning machinery manufacturer, and he will have to look after an increased trade, for grain handlers will find that they need more cleaners than usual. Smutty wheat cannot be used for milling purposes until it has been thoroughly cleaned, and some of it cannot be used by millers. The Agricultural Department has recently estimated the annual

loss to wheat growers from smut at \$18,000,000. As it can easily be exterminated by carefully selecting seed wheat from fields known to be free from loose smut there is no necessity for the farmers suffering this loss.

A GALENA newspaper says that "Illinois grain farmers have petitioned that the railroads be compelled to provide free grain storage. In the light that by law all the railroads in that state have to provide storage for all other freight, it seems curious that this provision has not been previously made." The petition was filed by the Illinois Grain Dealers' Association some months ago, but has not yet been granted. Every road should be required to provide storage and facilities for loading or else pay the elevator man for this service.

THE sharks are preying upon the gullible farmers of Southern Michigan who always prefer to deal with strangers, and are selling them seed wheat of a new variety which is warranted to yield 40 to 60 bushels to the acre. They charge \$4 a bushel and get plenty of suckers. It is a repetition of the Bohemian oats swindle. If farmers would buy their seed grain of the local elevator man, they would get clean seed of a good quality and at a fair price. Last season several elevator men made many new friends among the farmers and secured a good profit by shipping in a supply of superior seed wheat and sending notices to every farmer within a radius of ten miles to call and examine it.

GRAIN buyers who find upon delivery that the grain is not as good as contract calls for should quickly notify seller and ask for instructions as to its disposition. The buyer cannot legally dispose of it and then require the seller to deduct from the contract price; without consulting the seller he only has the option of accepting or refusing, and he must exercise this right within a reasonable time. If after inspection the buyer uses the grain in a way in which he would have no right to do without becoming the owner, such action will be deemed by the courts as an acceptance in spite of any declaration he may make to the contrary; that is, his actions will be accepted as evidence of his real intent.

JUDGING from reports from some districts of the winter wheat belt they have little wheat that is suitable for milling purposes. The quality varies greatly even in townships, and while some are getting good wheat others get nothing that is fit for much else than feed. Much of this poor stuff is being shipped and millers are drawing old wheat from the central markets. It will be a banner year for the wheat mixers, but they will have to mix more carefully than for years past. Michigan millers are complaining of the quality of this year's wheat and frequent complaints come from other districts also. Out of 40 cars of new wheat received one day recently at Nashville, Tenn., not one car was fit for milling.

THE owner of a grain elevator who is quick to grasp all the possibilities which he may see in connection with his business is on the road to prosperity. Feed grinding is becoming one of the legitimate adjuncts of the business of the grain elevator man. The miller is not better situated to take charge of this branch of trade. The proprietor of a grain elevator can easily find room for a feed grinding department. No capital is necessary except the first cost of the necessary machinery, and this is small. If the amount of feed ground does not warrant the employment of an extra man the mill can be run by the regular help of the elevator, when they are not otherwise engaged. During a season when low prices exist large quantities of wheat are ground into feed. When this condi-

tion of affairs exists a feed grinding department proves an unusually good paying institution.

A PUBLIC weighman in every public elevator would increase the chances of the country shippers securing honest weights, and the frequent transfer of the weighmen from one elevator to another would further increase the chances of correct weights. The transfer of weighmen serves to remind them of their duty to their employer.

DESPITE the fact that every co-operative association organized for handling the farmer's grain at the terminal markets of the Northwest has proved a failure, another has come into the field with a membership of 2,300 Dakota farmers, and a general agent at Duluth to handle the grain consigned to the association. It is not probable that the scheme will prove more successful than its predecessors.

ACCORDING to the report of the Bureau of Statistics breadstuffs to the value of \$8,500,913 were exported in June, against a valuation of \$8,138,593 exported in July, 1894; and in the seven months ending with July the exportations were valued at \$63,588,723, against \$74,497,378 during the same period of 1894. The exports of grain in July, compared with those of July, 1894, were: Wheat 4,271,291, against 5,557,944 bushels; corn 3,894,857, against 1,006,951 bushels; oats 296,433, against 48,820 bushels; barley 525,193, against 19,166 bushels; rye 153 bushels, against none in July, 1894; and the exports in the seven months ending July, compared with those of July, 1894, were: Wheat 38,569,212, against 36,361,527 bushels; corn 23,488,645, against 35,313,274 bushels; oats 543,587 against 338,109 bushels; barley 1,004,078, against 1,153,602 bushels; rye 610, against 232 bushels. In the seven months ending July 7, 707,855, against 8,906,125 barrels of wheat flour were exported; 15,931,287, against 5,418,757 pounds of oatmeal, and 127,340, against 167,622 barrels of cornmeal exported in the same time in 1894.

Points and Figures.

Clover seed is undoubtedly one of the most impure seeds now on the market.—*Breeder's Gazette*.

The Carnegie Steel Company is preparing to manufacture steel freight cars which will have a carrying capacity of 80,000 pounds.

The first lot of new clover seed was received at Chicago, August 5. It was from Southern Illinois, of choice quality and sold at \$9.50 per cental.

A stipulation that unless a telegram is repeated the company will not be liable for delays in its delivery does not relieve the company from liability for delays not due to error in the transmission of the message.

Wm. L. Barrington of Chicago says that Alvah Buckingham of Zanesville, Ohio, was the father of the elevator system not only in Chicago but in the United States. He with the late Solomon Sturgis built the Elevator "A" and "B" for the Illinois Central in the 50's, and supervised the proper setting of every plank of which they were constructed.

We have always believed that the farmers in this part of the state cut their wheat too late, and that much of it falls down, a great deal of it is lost by shelling out because it is too ripe, and that it is so hard it does not get the full benefit usually derived by going through the sweat, whereby the kernel is filled and plumped out.—*Times, Benson, Minn.*

An immense amount of poor seed is sold to American farmers and gardeners, according to a report issued by the Agricultural Department. While other countries for many years have been looking into the subject with a view of protecting their agriculturists from abuses in the seed trade, no investigations have been made in the United States except at a few experiment stations. Great apathy prevails, however, among purchasers of seed who, as a rule, buy the

cheapest in the market and trust to luck for it to produce the crop. Such seed, says the report, is dear at any price, and the principal source of the hosts of bad weeds, whose eradication costs vastly more than the few cents a pound extra which good seed would have cost.

The Southern Pacific Company has made a concession to the farmers in the Salinas Valley. It has announced a reduction in rates on wheat from all points on the coast division between Metz and Santa Margarita. The rate of wheat shipments from all points between the two stations named to San Francisco, Oakland or Stockton will hereafter be \$3 a ton.

This great "how-doo" about smut in the wheat is principally the work of elevator men to delude the farmers and lower the grade and price of wheat. All the truth about smut so far as this section of the valley is concerned "isn't worth the powder to blow it up."—*Drayton (N. D.) Echo*. Evidently the editor of the *Echo* has taken some smutty wheat on subscription accounts and failed to work it off on the local dealers for more than the price of feed.

Trade Notes.

The Borden & Selleck Co. of Chicago, Ill., has recently closed a number of contracts for Harrison Conveyors.

The experienced and sagacious advertiser investigates all advertising mediums, but cleaves closely to the best.

The spring wheat is reported full of smut. This should make an active demand for cleaners and scourers.

The Link Belt Machinery Company of Chicago has received a number of large contracts during the past month and the works are being run at full capacity.

We have received photographs, drawings and description of a new patent friction clutch, the invention of an Englishman who desires to sell the American rights. The invention is one of considerable merit.

Some of the wheat raised this season in Southern Minnesota is reported as being full of rye. Hence it will be a good crop for the inventor of cleaning machinery to try his skill upon. A good machine which would separate rye from wheat would meet with a large demand.

Chas Kaestner & Co. of Chicago, Ill., have recently introduced to the trade a complete line of fireproof elevator heads, boots and legs. The company reports a good business in supplying malt houses and breweries with its machinery, and orders have been coming in rapidly from the East, South and West.

The Foos Gas Engine Company of Springfield, Ohio, has built recently a 100-horse power gas engine which is in successful operation at the Indianapolis Switch & Frog Company's shops at Springfield. The company has a full force of men at work and is receiving plenty of orders for all sizes of its gas and gasoline engines.

We have received a sample of new Louisiana rice from Bloom Sons of New Orleans, La. The rice is very bright and of excellent quality. There seems to be, however, a chance of improvement in rice cleaning machinery used, as a considerable per cent. of the rice grains are broken and the foreign matter is not entirely removed.

The Dayton Gas Engine & Mfg. Company at Dayton, Ohio, will erect a new building, 80x150 feet, to accommodate its increasing business. The company has been increasing its force of men continually of late and is kept busy supplying the demand for its engines. A good trade is reported throughout the East and South.

Wm. B. Scaife & Sons of Pittsburg, Pa., write us as follows: "During the present season there has been an unusually large demand for the Caldwell Spiral Conveyor of our manufacture. For the handling of malt and grain this conveyor is unexcelled. We have also recently made some very large shipments to many distant points, of corrugated iron, which is used for roofing and siding malt houses, ele-

vators and other manufacturing plants. A very large quantity of galvanized corrugated iron was recently sent to Mexico."

As an inducement to buy sacks from the penitentiary, all parties who purchase bags this season are given the preference next year in the order in which the purchases are made; in other words, those who purchase bags this year are practically assured they can buy their supplies next season at the present price.—*Trade Register, Seattle, Wash.*

Sprout, Waldron & Co. of Muncy, Pa., have issued a new and handsome catalogue descriptive of their lines of machines. The different styles of feed mills manufactured by the company are described at length and a considerable amount of space is devoted to elevator and flour mill machinery and supplies. The catalogue will be mailed on application.

The A. P. Dickey Mfg. Co. report that business with them in the elevator line is booming. "The elevator men made many repairs during 1893 and 1894, but now their cleaners have got to a condition beyond repair and they are forced to put in new machines. Business is not quite as good as in 1892, but it is good. It has been good and the prospects are that it will continue good."

Geo. J. Fritz of St. Louis, Mo., manufacturer of the St. Louis Grain Scourer and other machines, died August 5. He had been in failing health for some time. Mr. Fritz was born in Baden, Germany, in 1846, and at the age of 12 years went to live in St. Louis. He embarked in business in 1874 by establishing a foundry and machine shop, and had since carried on a successful business.

The Union Iron Works of Decatur, Ill., were burned on the night of August 6. The fire started in the band saw room and is supposed to have been caused by a spark left by tanners who were working on the roof. Iron patterns worth \$50,000 were destroyed, but the wood patterns were saved. The loss amounts to \$80,000, with insurance of \$23,000. The company has resumed business and the works will be rebuilt at once.

EXPERIMENTS IN FLAX GROWING.

Extended investigations of much importance to the commercial interests of the country, having in view the determination of the possibility of growing flax here successfully for fiber, have been decided on by the agricultural department. The work will be begun at once, and will cover this season and doubtless extend to next year. The experiments will be conducted at East Ferndale, Wash., in the extreme northwest county in the United States. Agricultural officials believe that this region is best adapted to flax growing in view of its damp, moist climate, and the best flax raised in this country, practically all of which is for oil purposes and none for use as fiber, is said to be raised in the vicinity of Puget Sound. The investigations will involve expenditures aggregating at least \$900,000, and will be in charge of Dr. A. W. Thorntorn, the agent of the department there, who will be assisted by an expert Belgian who has been in this country for some time.

Special Notices.

CORN WANTED.

Office Chief Q. M., Chicago, Ill., Aug. 3, 1895.—Sealed proposals, in triplicate, will be received here and at offices of quartermasters of stations named, until 11 o'clock A. M., Central time, Sept. 3, 1895, and then opened, for furnishing corn during fiscal year ending June 30, 1896, at Forts Brady, Mackinac and Wayne, Mich.; Jefferson Barracks, Mo.; Forts Leavenworth and Riley, Kan.; Forts Reno and Sill, Okla. Proposals for delivering at other points will be entertained. Government reserves right to reject any or all proposals. Information furnished on application here or to quartermasters of stations named. Envelopes containing proposals should be marked "Proposals for Corn," and addressed to undersigned or quartermasters of stations named.

M. I. LUDINGTON, A. Q. M. G.

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since July 15 has been as follows:

July.	NO. 2 RED W. WHT.		NO. 2 SPG. WHEAT.		NO. 2 CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 3 BARLEY.		NO. 1 FLAX SEED.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
15	64 1/2	65 1/2	...	...	45 1/2	45 1/2	24 1/2	25 1/2	49	50	...	...	...	...
16	66 1/2	68	...	...	45 1/2	45 1/2	25 1/2	25 1/2	49	49	40	40	...	...
17	66 1/2	67 1/2	...	...	45 1/2	46	24 1/2	25 1/2	48 1/2	49	...	...	...	...
18	64 1/2	66 1/2	66 1/2	66 1/2	44	44 1/2	23 1/2	24 1/2	47 1/2	48	38	38	...	...
19	65	65 1/2	...	...	43 1/2	44	23 1/2	24 1/2	47 1/2	48	40	40	...	...
20	66 1/2	67	...	...	43 1/2	44 1/2	24 1/2	24 1/2	48	48	40	40	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	127	128
22	67 1/2	67 1/2	...	...	43 1/2	44 1/2	24 1/2	25 1/2	49	50	...	...	...	...
23	68	68	...	...	44 1/2	45 1/2	24 1/2	26 1/2	49 1/2	49 1/2	...	...	...	...
24	69	72 1/2	...	...	44 1/2	45 1/2	25 1/2	26 1/2	50	50	38	38	...	...
25	70	71	...	...	43 1/2	44 1/2	24 1/2	25	50	50	...	...	...	...
26	69	69 1/2	...	...	43	43 1/2	23 1/2	24 1/2	49	49	37	37	130	130
27	71	72	...	...	43	43 1/2	23	24	49	49	36	37	129	129
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	71 1/2	72 1/2	...	...	43	44	23	24	49 1/2	50	33	47	124	125
30	...	...	...	...	43 1/2	43 1/2	23	23 1/2	49 1/2	49 1/2	39	39	121	122
31	69 1/2	70	...	...	43	43 1/2	23 1/2	24	...	...	...	...	119	121
1	68 1/2	68 1/2	...	...	43	44 1/2	23 1/2	24	46	45	37	37	115	116
2	68 1/2	69	...	...	43	44	23 1/2	23 1/2	45 1/2	46	39	39	11 1/2	11 1/2
3	71 1/2	68	...	...	41 1/2	42	22	23	44 1/2	45	38	38	112	112
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	68 1/2	68 1/2	67	68 1/2	41	42	21	22 1/2	45	45	38	38	109	110 1/2
6	68 1/2	68 1/2	...	...	40 1/2	41 1/2	21 1/2	22 1/2	44 1/2	45	36	47	103	105
7	67	67 1/2	67 1/2	67 1/2	40 1/2	40 1/2	21	21 1/2	...	...	33	36	105	107
8	66 1/2	67	67	67	39 1/2	40 1/2	21	21 1/2	44 1/2	44 1/2	36	6	11	112
9	66	68	67 1/2	68	40 1/2	41 1/2	21 1/2	22	...	...	37	37	109	111
10	67 1/2	68	67 1/2	68	40 1/2	41 1/2	20 1/2	20 1/2	44 1/2	44 1/2	38	38	108	108
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	66 1/2	67 1/2	67	67	38	39	20 1/2	21 1/2	45	45	38	38	108	109
13	66	66 1/2	66 1/2	66 1/2	38 1/2	38 1/2	20 1/2	20 1/2	44	44	36	38	108 1/2	108 1/2
14	65 1/2	66 1/2	65 1/2	66 1/2	36 1/2	39 1/2	19 1/2	19 1/2	44	44	37	38	109	110
15	65	66 1/2	66	66	38 1/2	39 1/2	20 1/2	20 1/2	44	44	...	...	108	109

* On track. † Free on board or switched.

During the week ending July 20 Prime Contract Timothy sold at \$5.75@5.85 per cental; Prime Contract Clover Seed at \$9.50; Hungarian at \$1.50@2.50; German millet at \$1.50@3.50; buckwheat at \$1.20@1.40 per 100 pounds. The receipts of hay for the week were 4,976 tons, against 3,909 tons the previous week. Shipments were 400 tons, against 688 tons for the previous week. The arrivals of old timothy hay were light and the inquiry was good, both on local and shipping account. A steady and firm feeling prevailed. The receipts of new timothy are gradually increasing and the offerings were quite liberal. Only a moderate demand existed and price declined \$1.00@1.50 per ton. New upland prairie was in large supply and the demand was only fair. Considerable hot and heating hay among the arrivals, and such lots were difficult to sell. Old prairie hay scarce and firm. Demand good for choice descriptions. Sales of choice timothy ranged at \$12.50@14.50 for new, and \$14.50@15.50 for old; No. 1, \$13.00@13.50 for new, and \$14.50 for old; No. 2, \$12.50 for new; mixed, \$12.00 for old; not graded, \$10.00 for new in a heating condition, \$12.50 for good and \$11.00@14.00 for old; Illinois Upland Prairie, \$7.00@9.00 for new; Indiana, \$8.00@10.00 for new; Kansas, \$10.00@12.50 for new; Iowa, \$7.00@8.00 for new in a heating condition and coarse, \$9.00@11.00 for good to fancy, and \$11.00@13.25 for old; packing hay, \$5.25@5.50. Rye straw sold at \$5.00@5.25.

During the week ending July 27 Prime Contract Timothy sold at \$5.75@6.00 per cental; Prime Contract Clover Seed at \$9.50; Hungarian at \$1.50@2.50; German millet at \$1.50@3.50; buckwheat at \$1.20@1.40 per 100 pounds. Receipts of hay for the week were 4,600 tons; shipments, 654 tons. The inquiry for both new and old timothy was quite good during the past week and a firm feeling existed, but prices exhibited no particular change. Arrivals small. The market for new upland prairie ruled rather dull during the early part of the week, but toward the close the demand improved, the scarcity of timothy hay compelling dealers to give the market a little more attention. Buyers were taking the Iowa in preference to Kansas. No material change to note in prices. Choice sound old hay was in good demand and firm. Sales of choice timothy ranged at \$12.50@14.00 for new, and \$14.00@16.50 for old; No. 1, \$12.50@13.00 for new; No. 2, \$12.00 for new; mixed, \$11.00 for new; not graded, \$12.00 for new and \$14.00 for old; Illinois Upland Prairie, \$7.00@8.50 for new; Indiana, \$8.00@9.00 for new; Kansas, \$6.00@11.00 for poor to fancy new, and \$10.50 for old; Nebraska, \$8.50@10.25 for old; Minnesota, \$10.25 for new; Iowa, \$8.00@11.00 for fair to fancy new, and \$9.50@12.50 for poor to fancy old. Wheat straw sold at \$4.00 and rye straw at \$4.50@5.00.

During the week ending August 3 Prime Contract Timothy sold at \$5.60@5.65 per cental; Prime Contract Clover Seed at \$9.60; Hungarian at \$1.50@2.50; German millet at \$1.50@3.50; buckwheat at \$1.20@1.40 per 100 pounds. Receipts of hay for the week were 4,321 tons; shipments, 632 tons. The arrivals of new timothy hay were light during the past week and the demand was good. The market ruled firm and prices advanced about 50 cents per ton. Season for old hay about over. Receipts small and demand irregular. New Kansas Upland Prairie was in large supply and market was very dull. The inquiry was light, buyers taking the Iowa in preference. Prices declined \$0.50@1.00 per ton. New Iowa Prairie Hay met with a good demand. The offerings were only moderate and a firm feeling prevailed with no material change in prices. Old hay was dull and diffi-

cult to dispose of. Sales of choice timothy ranged at \$13.00@14.50 for new, \$13.75@15.50 for old; No. 1, \$12.50@13.50 for new; not graded, \$8.00 for new heating, \$11.00@12.00 for good and \$13.25 for old; Illinois Upland Prairie, \$7.00@9.00 for new; Kansas, \$6.00 for new heating and \$8.00@10.50 for good to fancy; Nebraska, \$7.00 for new; Arkansas, \$8.50; Iowa, \$6.00 for new coarse, \$9.00@11.00 for good to fancy, and \$9.00@11.50 for old; packing hay, \$5.00. Rye straw sold at \$5.25@6.00.

During the week ending August 10 Prime Contract Timothy sold at \$4.35@5.35 per cental; Prime Contract Clover Seed at \$9.25@9.60; Hungarian at \$1.50@2.50; German millet at \$1.50@3.50; buckwheat at \$1.20@1.40 per 100 pounds. Receipts of hay for the week were 6,043 tons; shipments, 544 tons. The market for timothy hay ruled firm during the past week. Arrivals small and the demand was good, principally on local account. No change to note in prices. Iowa Upland Prairie was in light supply during the early part of the week, and a good inquiry existed. Prices ruled firm. Later the receipts became more liberal, and the demand was less urgent. Prices declined about 50 cents per ton. Kansas hay was very dull. One reason for this was the poor quality of the offerings, a large portion being in a heated condition, for which there was almost no demand. Even good sound hay was hard to sell, buyers taking the Iowa in preference. Prices declined \$0.50@1.00 per ton. Sales of choice timothy ranged at \$13.50@14.25; No. 1, \$12.75@13.50; not graded, \$12.00@13.00; Illinois Upland Prairie, \$7.00@9.00; Indiana, \$6.00 for heating and \$6.50@9.00 for poor to choice; Kansas, \$5.00@7.00 for heating and \$8.00@10.00 for good to fancy; Iowa, \$8.50@11.00 for fair to fancy; packing hay, \$4.50. Rye straw sold at \$4.50@6.00.

RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain at Toledo, Ohio, during the 4 weeks ending August 3, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	1,354,800	4,092,900	567,700	3,294,000
Corn, bushels.....	182,000	40,600	189,100	2,800
Oats, bushels.....	45,900	33,200	8,100	3,500
Barley, bushels.....	9,000	...	...	...
Rye, bushels.....	30,600	28,500	8,100	5,600
Clover seed, bags.....	...	...	...	...
Flour, barrels.....	4,324	4,668	95,071	119,224

RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the month ending July 31, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	74,400	191,700	55,800	139,800
Corn, bushels.....	934,650	768,650	407,650	386,250
Oats, bushels.....	1,565,150	860,200	1,951,400	742,000
Barley, bushels.....	11,200	18,900	15,400	8,400
Rye, bushels.....	7,200	9,600	3,000	3,100
Mill Feed, tons.....	360	351	4,426	1,518
Seeds, lbs.....	...	...	...	...
Broom Corn, lbs.....	30,000	30,000	30,000	...
Hay, tons.....	2,360	780	622	192
Flour, barrels.....	15,150	21,450	16,800	15,450
Spirits & Liquors, bbls.	2,470	3,992	9,180	29,734
Syrup & Glucose, bbls.	550	2,600	26,973	15,888

RECEIPTS AND SHIPMENTS AT CINCINNATI.

The receipts and shipments of grain and hay at Cincinnati, Ohio, during the month ending July 31, as compared with the same period of the preceding year, were, according to C. B. Murray, superintendent of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	102,757	141,771	42,735	91,522
Corn, bushels.....	234,744	376,253	53,912	47,792
Oats, bushels.....	253,836	241,274	81,329	29,215
Barley, bushels.....	1,761	6,442	...	2,100
Rye, bushels.....	17,994	51,705	2,101	1,847
Clover Seed, bags.....	278	106	458	137
Timothy Seed, bags.....	1,754	207	1,271	204
Other Grass Seed, bags.....	1,847	2,018	2,162	1,493
Hay, tons.....	2,610	3,239	918	839
Flour, barrels.....	75,340	86,329	47,130	62,786
Malt, bushels.....	52,181	36,705	32,340	65,082

RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during July, 1895 and 1894, of seeds, hay and broom corn:

Repts.	Timothy, lbs.	Clover, lbs.	Other grass seeds, lbs.	Flax-seed, bu.	Broom corn, lbs.	Hay, tons.
1895 ..	152,430	320,961	291,330	66,655	94,000	19,559
1894 ..	4,200	88,809	53,961	124,055	...	12,358
Shipts.						
1895 ..	1,434,470	258,908	421,672	50,666	384,878	2,855
1894 ..	595,719	49,093	339,067	28,459	256,498	1,038

RECEIPTS AND SHIPMENTS AT DULUTH.

The receipts and shipments of grain and hay at Duluth, Minn., during the 4 weeks ending August 3, as compared with the same period of the preceding year, were, according to Frank E. Wyman, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels....	1,704,645	2,461,329	3,075,945	2,972,831
Corn, bushels....	...	24,460	...	1,892
Oats, bushels....	26,294	43,231	164,853	3,344
Barley, bushels....	585	...	164	...
Rye, bushels....	199	...	...	...
Flaxseed, bushels.	61	211	...	...
Flour, barrels....	400,710	617,215	408,495	801,060
Flour, produced.*	382,535	315,488	...	...

*Duluth and Superior.

RECEIPTS AND SHIPMENTS AT SAN FRANCISCO.

The receipts and shipments of grain and hay at San Francisco, Cal., during the month ending July 31, as compared with the same period of the preceding year, were, according to T. C. Friedlander, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, centals.....	1,669,261	326,951	1,222,837	54,690
Corn, ".....	12,480	21,729	939	7,487
Oats, ".....	59,486	27,556	2,935	2,419
Barley, ".....	122,593	124,126	293,467	16,039
Rye, ".....	4,240	2,659	...	...
Flaxseed, bushels..	1,351	...	...	...
Hay, tons.....	10,773	13,707	...	...
Flour, bbls.....	111,820	80,360	39,384	64,383

RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the 4 weeks ending August 3, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	829,380	2,010,090	1,013,320	596,420
Corn, bushels.....	75,090	175,380	6,210	22,770
Oats, bushels.....	222,030	194,700	60,830	70,670
Barley, bushels.....	3,520	2,061	...	540
Rye, bushels.....	35,960	9,930	3,460	4,970
Flaxseed, bushels....	1,600	2,000	2,510	1,920
Hay, tons.....	2,077	1,546	55	10
Flour, barrels.....	8,634	17,160	675,685	594,280

RECEIPTS AND SHIPMENTS AT BUFFALO.

The receipts and shipments of grain and hay at Buffalo, N. Y., during the month ending July 31, as compared with the same period of the preceding year, were, according to Wm. Thurstone, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts by lake.		Shipments by canal.	
	1895.	1894.	1895.	1894.
Wheat, bushels...	2,393,067	8,478,725	2,303,102	7,556,402
Corn, bushels....	3,654,989	2,056,341	4,269,525	1,832,926
Oats, bushels.....	2,273,378	1,426,487	3,221,696	976,489
Barley, bushels...	9,250	12,926	47,492	12,000
Rye, bushels		49,840		30,497
Grass Seed, bags...				
Flaxseed, bushels.				
Hay, tons.....				
Flour, barrels	691,287	817,520		

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Aug. 10, 1895, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany.....	825,000	59,000	80,000	15,000	.....
Baltimore.....	148,000	288,000	86,000	.....	.....
Boston.....	1,193,000	252,000	268,000	42,000	7,000
Buffalo.....	.....	.....	.....	.....	.....
do afloat.....	15,373,000	1,335,000	701,000	68,000	.....
Chicago.....	.....	.....	.....	.....	.....
do afloat.....	35,000	37,000	5,000	8,000	.....
Cincinnati.....	241,000	86,000	28,000	14,000	.....
Detroit.....	.....	.....	.....	.....	.....
do afloat.....	5,812,000	.....	67,000	3,000	1,000
Duluth.....	.....	.....	.....	.....	.....
do afloat.....	252,000	39,000	18,000	.....	.....
Indianapolis.....	293,000	35,000	2,000	3,000	.....
Kansas City.....	243,000	.....	.....	9,000	8,000
Milwaukee.....	.....	.....	.....	.....	.....
do afloat.....	6,293,000	5,000	55,000	20,000	6,000
Minneapolis.....	10,000	3,000	160,000	4,000	.....
Montreal.....	3,518,000	274,000	1,229,000	2,000	.....
New York.....	89,000	9,000	88,000	.....	21,000
do afloat.....	16,000	26,000	.....	.....	.....
Oswego.....	26,000	40,000	2,500	.....	.....
Peoria.....	391,000	67,000	152,000	.....	.....
Philadelphia.....	960,000	251,000	80,000	4,000	1,000
St. Louis.....	.....	20,000	.....	.....	.....
do afloat.....	1,162,000	153,000	147,000	55,000	.....
Toledo.....	.....	.....	.....	.....	.....
do afloat.....	8,000	.....	30,000	.....	.....
Toronto.....	192,000	108,000	121,000	7,000	.....
On Canals.....	758,000	1,439,000	256,000	.....	.....
On Lakes.....	1,000	57,000	22,000	.....	.....
On Miss. River.....	.....	.....	.....	.....	.....
Total.....	37,839,000	4,613,000	3,925,000	254,000	44,000
Corresponding date, 1894.....	62,321,000	3,164,000	2,854,000	230,000	87,000

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector George P. Bunker the grain received at Chicago during the month of July, 1895, was graded as follows:

WINTER WHEAT.

Railroad.	White.			Hard.			Red.			No G'de.
	2	3	4	1	2	3	1	2	3	4
C., B. & Q.....	12	4	.....	102	269	20	3
C., R. I. & P.....	5	6	.....	11	16	15	7
C. & A.....	1	71	.....	33	144	38	4
Illinois Central.....	16	54	.....	24	107	17	2
Freeport Div.....	1	1	.....	.....
Galena Div. N. W.....	1	1	.....	.....
Wis. Div. N. W.....	3	2	1	.....
Wabash.....	5	.....	6	135	19	11
C. & E. I.....	1	1	.....	13	79	4	2
C., M. & St. P.....	1	.....	.....
Wis. Cent.....
Gr. Western.....
A., T. & S. Fe.....	1	2	.....	.....	30	.....	7	26	5	2
Through & Spec.....	42	44	1	.....
Total each grade.....	1	2	.....	35	171	.....	242	825	120	31
Total W. wheat.....	3	.....	.....	.....	206	.....	.....	.....	.....	1,218

SPRING WHEAT.

Railroad.	Colo-rado.	2	3	4	No Grade	White.	Mixed Wheat.
	2	3	.....	.....	.....	2	3
C., B. & Q.....	27	2	3	1	.....	.....	.....
C., R. I. & P.....
C. & A.....
Illinois Central.....
Freeport Div.....
Galena Div. N. W.....	5	3	.....	.....	.....
Wis. Div. N. W.....
Wabash.....
C. & E. I.....
C., M. & St. P.....	1
Wis. Cent.....
C. Gr. Western.....	1	.....	.....
A., T. & S. Fe.....
Through & Special.....	50	.....	.....	.....	.....
Total each grade.....	27	2	60	4	1	.....	1
Total sp. wheat.....	29	.....	.....	.....	.....	65	.....

CORN.

Railroad.	Yellow.		White.		2	3	4	No Grade.
	2	3	2	3	.....	.....	.....	.....
C., B. & Q.....	307	10	49	3	39	13	18	2
C., R. I. & P.....	146	5	72	6	183	21	9	1
C. & A.....	198	35	112	21	326	94	9	1
Illinois Cent.....	914	32	400	5	370	41	6	.....
Freeport Div.....	54	.....	5	.....	24	2	1	.....
Gal. Div. N. W.....	38	3	2	.....	54	9	8	.....
Wis. Div. N. W.....	1	2	.....	.....	.....	.....	.....	.....
Wabash.....	364	14	183	16	241	13	24	3
C. & E. I.....	70	4	49	2	231	19	10	.....
C., M. & St. P.....	4	1	.....	.....	3	6	5	.....
Wis. Central.....	.....	.....	.....	.....	.....	.....	.....	.....
C. Gr. Western.....	12	1	4	.....	60	6	1	1
A., T. & S. Fe.....	52	4	25	1	148	3	3	.....
Thrh'g & Spcl.....	111	1	32	3	157	8	36	.....
Total each grd.....	2,271	112	933	60	2,188	235	130	8
Total corn.....	.....	.....	.....	.....	.....	.....	.....	5,939

OATS.

Railroad.	White.			2	3	White Clipped.		No G'de.
	1	2	3			1	2	
C., B. & Q.....	683	103	103	23	.....	.....	4
C., R. I. & P.....	365	233	46	58	.....	.....	7
C. & A.....	71	17	63	49	.....	.....	19
Illinois Central.....	171	67	216	69	.....	.....	5
Freeport Div.....	208	55	22	5	.....	.....	.....
Galena Div. N. W.....	418	98	51	29	.....	1	.....
Wis. Div. N. W.....	38	30	9	25	.....	.....	.....
Wabash.....	87	19	60	45	.....	.....	33
C. & E. I.....	15	25	50	76	.....	.....	2
C., M. & St. P.....	326	159	65	32	.....	3	1
Wisconsin Central.....	1	.....	.....	.....	.....	.....	.....
C. G. Western.....	51	21	23	7	.....	.....	.....
A., T. & S. Fe.....	139	20	41	9	.....	.....	2
Through & Special.....	95	11	19	4	.....	4	1
Total each grade.....	2,668	858	768	431	.....	8	74
Total oats.....	4,807

RYE.

Railroad.	1	2	3	No Grade.
C., B. & Q.....	34	3
C., R. I. & P.....	12	8
C. & A.....	3	7
Illinois Central.....	11	1
Freeport Div.....	1	.....
Galena Div. N. W.....	16	5
Wisconsin Div. N. W.....	1	.....
Wabash.....	2	5
C. & E. I.....	7	7
C., M. & St. P.....	2	.....
Wisconsin Central.....	1	.....
C. G. Western.....	1	.....
A., T. & S. Fe.....	3	3
Through & Special.....	3	.....
Total each grade.....	98	43
Total rye.....	141

BARLEY.

Railroad.	Bay Brewing.		Chevalier.		No Grade.	Total No. Cars all grain by Roads.
	3	3	2	3		
C., B. & Q.....	2	1	.....	2,192
C., R. I. & P.....	10	1	1,246
C. & A.....	1,316
Illinois Central.....	2,531
Freeport Div.....	4	.....	382
Galena Div. N. W.....	8	.....	750
Wis. Div. N. W.....	18	6	137
Wabash.....	1,235
C. & E. I.....	1	666
C., M. & St. P.....	6	16	1	640
Wisconsin Central.....	1	5	8
C. G. Western.....	6	.....	195
A., T. & S. Fe.....	7	.....	533
Through & Spec'l.....	2	624
Total each grade.....	8	71	16	2	12,505
Total barley.....	98
Total grain, cars.....	12,505

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending Aug. 10, as compared with same weeks last year, have been as follows:

	For the week ending Aug. 10.		For the week ending Aug. 11.		For the week ending Aug. 3.		For the week ending Aug. 4.	
	1895.	1894.	1895.	1894.	1895.	1894.	1895.	1894.
Wheat, bu.....	307,000	1,540,000	295,000	1,792,000	.....	.....	.....	.....
Corn, bushels.....	1,006,000	125,000	1,050,600	169,000	.....	.....	.....	.....
Oats, bushels.....	159,000	12,000	19,000	10,000	.....	.....	.....	.....
Rye, bushels.....	.....	9,000	.....	.....	.....	.....	.....	.....
Flour, bbls.....	176,000	292,000	171,000	203,000	.....	.....	.....	.....

RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the 4 weeks ending August 3, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	343,200	304,568	33,450	131,595
Corn, bushels.....	91,000	111,800	6,500	2,600
Oats, bushels.....	359,075	361,750	515,443	399,605
Barley, bushels.....	22,400	20,800	1,600	800
Rye, bushels.....	45,600	27,621	1,800	.....
Grass seed, pounds.....	26,755	63,756	9,290	60,350
Flaxseed, bushels.....	800	1,740	.....	1,622
Broom corn, lbs.....	.....	.....	.....	.....
Hay, tons.....	1,368	797	33	140
Flour, barrels.....	134,825	46,650	164,164	139,112

DESTINATION OF AMERICAN WHEAT EXPORTS.

The last report of the Bureau of Statistics shows that the destination of the wheat exported from the United States was as follows:

Countries.	Month ending June 30.		Eleven months ending June 30.	
	1895.	1894.	1895.	1894.
United Kingd'm	1,922,835	3,411,292	54,373,341	50,868,680
Germany.....	161,712	48,781	2,526,930	1,760,779
France.....	31,932	.....	1,596,791	8,701,100
Other countries in Europe....	698,316	581,599	13,296,961	22,657,145
Brit. North Am. Possessions...	629,575	464,716	4,110,255	4,260,805
Mexico.....	1,208	12	7,938	6,130
Cent. Am. states & Brit. Hond	3,575	13,185	90,991	40,572
West Indies and Bermuda....	600	67	9,518	15,614
Brazil.....	4	.....	63	63
Other countries S. America...	.....	800	2,887	5,176
Asia & Oceanica	495	5,669	38,760	12,117
Africa.....	30	8,302	48,194	87,049
Other countries	.....	23	75	.....
Total bushels	3,450,282	4,534,446	76,102,704	88,415,230

ELEVATOR AND GRAIN NEWS

An elevator will be built at Colby, Wis.
 An elevator will be built at Trenton, Mo.
 An elevator may be erected at Manawa, Wis.
 J. Malone will build an elevator at Windsor, Ont.
 The new elevator at Cloverdale, Ind., is completed.
 An elevator is being erected at East Rochester, Ohio.
 West Cairo, Ohio, has a new 40,000 bushel elevator.
 A farmers' elevator is being erected at Killarney, Man.
 Mr. Schaller is building an elevator at Canastota, S. D.
 T. H. Berry & Co. are erecting an elevator at Tiffin, Ohio.
 Strong & Miller will erect an elevator at Wheaton, Minn.
 A cottonseed oil mill may be erected at Cleburne, Texas.
 J. W. McMillen's elevator at Cavett, Ohio, is completed.
 W. B. Garard's new elevator at Basco, Ill., is completed.
 Henning, Ill., is to have a new elevator, it is reported.
 C. E. Hibbs of Genesee, Wash., is going to build an elevator.
 The new Hubbard Elevator at Winchester, Ill., is completed.
 The 90,000-bushel elevator at Hicksville, Ohio, is completed.
 The elevator being erected at Galton, Ill., is about completed.
 George Seaton Sr. has purchased the elevator at Seaton, Ill.
 W. D. Harry & Co. are erecting an elevator at Peabody, Kan.
 Marsh & Smith, millers of Omaha, Neb., will erect an elevator.
 The elevator being erected at Scovel, Ill., is nearing completion.
 A potato starch factory may soon be built at Bridgeport, Wash.
 George Sharrard will erect an elevator at Bridge-water, S. D.
 George and W. T. Law are erecting an elevator at Stanton, Minn.
 Flannagan & Co. have completed their new elevator at Kumler, Ill.
 Herrington & Milligan are building an elevator at Jefferson, Iowa.
 Tolefson & Woolsted are building an elevator at Harmony, Minn.
 L. C. Hough & Son are building a large elevator at Plymouth, Mich.
 M. Kesi of Elberon, Iowa, has lately adopted the Dickey Overblast.
 H. H. Steele, Golden City, Mo., has put in a No. 4 Dickey Overblast.
 The new railroad grain warehouse at Los Banos, Cal., is completed.
 J. W. Jennison of Janesville, Wls., recently bought a line of elevators.
 John Burruss of Miami, Mo., has adopted the Dickey Warehouse Cleaner.
 L. Hoebel at Unadilla, Neb., has put in a Dickey Warehouse Cleaner.
 The Alianza Company is building an elevator at San Antonio, Texas.
 The Holmes-Bentley Company is building an elevator at Elm Springs, S. D.
 G. D. Knapp of Oconto, Wis., says that an elevator is needed in his town.
 The Harrison-Switzer Company is building an elevator at Belleville, Ill.
 J. Q. Patterson has started in the grain commission business at Peoria, Ill.
 A new elevator is being erected at Winona, Minn., by G. H. Krumdick, with a capacity of 21,000 bushels.

It will be entirely modern and have the latest improved machinery.

James and John Jones will build a 25,000-bushel elevator at Adrian, Minn.

The Northern Iowa Grain Company is building an elevator at Rolfe, Iowa.

F. H. Peavey & Co. may erect an elevator at Montrose, S. D., this summer.

J. A. Drew, dealer in grain, etc., at Minneapolis, Minn., assigned recently.

James M. Gagan, a man-with-a-scoop, is buying wheat at Thompson, N. D.

A. L. Maple and E. T. Bridge are in the grain buying business at Quincy, Ill.

A 3,000-bushel elevator is being erected at Laurel, Md., by Schooley & Tighe.

Kennedy Bros. of Esmond, Ill., have put in the Dickey Warehouse Cleaner.

The Tacoma Grain Company is building a grain warehouse at Wilbur, Wash.

K. W. Jargo & Co. of Hardwick, Minn., have bought the Otterson Elevator.

M. C. Woodworth's new 35,000-bushel elevator at Winchester, Ill., is completed.

Gier & Belze are contemplating the erection of a large elevator at Conrad, Iowa.

John Hass, grain dealer at Traer, Iowa, is remodeling and enlarging his elevator.

N. K. Simmons & Co., grain dealers of Red Wing, Minn., are erecting an elevator.

A. Johnson has succeeded Scott & Muncie, grain dealers at San Bernardino, Cal.

The Cokato (Minn.) farmers' elevator has declared an annual dividend of 40 per cent.

The Dickey Elevator Cleaners are being put in at Swea City, Iowa, for S. H. Grannis.

Benson & Son's new elevator at Colfax, Ill., is completed and about ready for business.

It is said that an elevator will be erected at Cummingsville, Ohio, at a cost of \$8,000.

The Keiser & Holmes Elevator Company has commenced business at Gibson City, Ill.

The Waukesha Grain and Produce Company will build an elevator at Waukesha, Wis.

John S. Brown & Son have succeeded Elliott & Brown, grain dealers at Saltsburg, Pa.

Laun Bros'. new 12,000-bushel elevator at Elkhart Lake, Wis., is completed and running.

J. E. Pullin & Co. of Fort Gaines, Ga., will build a cottonseed oil mill at a cost of \$50,000.

The Chelan Falls Shipping Company is building a grain warehouse at Chelan Falls, Wash.

During July the Seattle (Wash.) Elevator shipped out 28 tons of wheat and 80 tons of flour.

Wilson, Moore & Co. of Arden, Man., are building a new elevator of 30,000 bushels' capacity.

Louis Prell, whose elevator at Columbus, Kan., burned recently, is arranging to rebuild.

Bomberger & Son, grain dealers at Stratford, Ill., bought the first load of new oats July 22.

The Pratt Grain Company will build a large cornmeal mill at Decatur, Ill., to cost \$75,000.

S. W. Hale's elevator at Geneva, Ind., which was destroyed by fire recently, will be rebuilt.

The Farmers' Union Milling Company of Stockton, Cal., has erected a large grain warehouse.

The Victoria Elevator Company of Olivia, Minn., has made arrangements for a new elevator.

Montague & Howlett, grain dealers at Madison, S. D., have succeeded Malloy & Montague.

McCorkle & Pendleton have succeeded J. T. Brown & Co., grain dealers of San Antonio, Texas.

J. R. Ashton has succeeded G. W. Miller in the grain and elevator business at San Jose, Cal.

The new Lake Shore Elevator at Buffalo, N. Y., is finished and business has been commenced.

Fritts Bros. & Amunson, grain dealers of Fairview, S. D., are preparing to erect a large elevator.

The Richland Roller Mills is building an elevator of 25,000 bushels' capacity at Hankinson, N. D.

Samuel W. Dunlap has organized a stock company at Woodlyn, Ohio, and will erect an elevator.

W. A. Fraser has bought L. B. De Forest's interests in the grain business at North Henderson, Ill.

G. Montague, the Chicago Board of Trade commission dealer who assigned recently, has settled up for 50

cents on the dollar and is in business again, and warmly welcomed by his associates.

S. Nelson, grain dealer, has erected an elevator at Leighton, Iowa, and will extend his business.

The Freeman Elevator at Superior, Wis., is being equipped with an automatic sprinkler system.

Lawson & Gramlich are a new firm organized at Kenton, Ohio, to engage in the grain business.

Paige, Horton & Gunderson have organized to carry on a grain business at Duluth and Minneapolis.

The elevator at Amboy, Minn., is to be enlarged from 20,000 bushels' to 35,000 bushels' capacity.

G. H. Krumdick at Winona, Minn., has put in the Dickey Overblast for flax and all kinds of grain.

The Dickey Warehouse Cleaners have been put in elevators at Evansville, Ind., and Cashton, Wis.

The Long Dock Mill and Grain Company of Jersey City, N. J., will build an elevator to cost \$20,000.

B. P. Staley's new elevator at Myra, Ill., is receiving new machinery and will soon be in operation.

The company that owned the elevator at Alexandria, S. D., which burned last year, is rebuilding.

At Shedd's, Ore., Simmons & Thompson have equipped with the Dickey Overblast Grain Cleaner.

Albert Gapp, grain dealer of Montrose, S. D., has overhauled and increased the capacity of his elevator.

J. A. Rhode has purchased the elevator at Morrison, Iowa, for \$5,000, and will engage in the grain business.

The Duff Grain Company of Nebraska City, Neb., has completed its new elevator and is now operating it.

John Culp will build an elevator at Hastings, Ill., to take the place of the one destroyed by fire some time ago.

W. W. Burgess has left Pierson, Iowa, and has gone into the grain buying business at Clinton Junction, Wis.

David Askegaard, Comstock, Minn., has adopted the Dickey Overblast for cleaning all kinds of grain and flax.

The C. W. Stancel Company has been incorporated at Chicago with a capital stock of \$100,000 to deal in grain.

The Des Moines Seed Company has been incorporated at Des Moines, Iowa, with a capital stock of \$5,000.

The Menan Milling Company is building a 40,000-bushel elevator adjoining its flour mill at Menan, Idaho.

The H. J. O'Neill Grain Company's new 40,000-bushel elevator at St. Charles, Minn., is about completed.

F. W. Obermiller of Mt. Pulaski, Ill., has purchased St. John & Sloan's elevator and grain business at Kenney, Ill.

The movement for a farmers' elevator at Emington, Ill., has been abandoned, at least until after corn huskin'.

F. Bohri & Son of Fountain City, Wis., have lately adopted the Dickey Overblast for all kinds of grain and flax.

J. G. Dutton & Co. of Perry, Iowa, have succeeded M. Crawford in the grain and elevator business at Minburn.

The Standard Cottonseed Company of Little Rock, Ark., has been incorporated with a capital stock of \$1,000,000.

The Desportes Commission Company has been incorporated at Winnsboro, S. C., with a capital stock of \$10,000.

Meents, Smith & Cloke have succeeded Searing, Smith & Cloke, dealers in grain and lumber at Chatsworth, Ill.

The Duff Grain Company of Syracuse, Neb., and J. H. Currie at Bradshaw, Neb., have put in Dickey Overblasts.

The C. H. & D. Elevator being erected at Toledo, Ohio, is about completed and will soon be receiving new wheat.

O. Olson & Son, grain buyers at Bishop Hill and Cambridge, Ill., made an assignment recently, but may resume.

The Farmers' Elevator Company's large elevator being erected at St. Louis, Mo., will be completed by December 15.

S. C. Taylor of Cabery, Ill., may erect an elevator at Hersher, if the Illinois Central will kindly consent to a location.

Sibley & Moore, grain and flour dealers at Springfield, Mass., have dissolved partnership. Mr. Sibley, who has been in the business for 20 years, retires from

the firm owing to poor health, and Mr. Moore will hereafter conduct the business in his own name.

W. A. McLagan and J. R. Whitney have organized a company to carry on a grain commission business at Carroll, Iowa.

The St. Paul and Kansas City Grain Company is contemplating the erection of an elevator at Portsmouth, Iowa.

The Texas Grain Company has succeeded to the branch business of the Empire Grain Company at Ft. Worth, Texas.

The Twin City Roller Mills has erected an elevator at Webb City, Mo., to be operated in connection with the flour mills.

H. Griffith is operating the elevator formerly belonging to J. R. Gent, miller, of Columbus, Ind., who failed recently.

The new Great Western Elevator at Belview, Minn., is completed and in operation under the management of John Martin.

The Farmers' Mercantile and Elevator Company has been incorporated at Kenyon, Minn., with a capital stock of \$10,000.

W. A. Munger is erecting an elevator on his farm on Sni Island, near Hannibal, Mo., which will be ready for the new crop.

The Northern Grain Company of New Richmond, Wis., has adopted the Dickey Overblast for its houses at Mondovi, Wis.

The Empire Elevator Company's elevator at Willmot, S. D., has been overhauled and improved for receiving new grain.

Geo. F. Brown, one of the oldest grain merchants of Morris, Ill., made an assignment recently with liabilities of about \$10,000.

Lilly, Bogardus & Co. intend to open a grain, feed and flour warehouse at Juneau, Alaska. C. J. Anderson will be manager.

C. W. George has completed a 12,000-bushel elevator at Redwood Falls, Minn. It is 24x64 feet in size and is run by horse power.

Cowan & High are about to erect at Ovid, Ohio, an elevator which will be known as the Michigan Produce Company Elevator.

R. G. Risser of Kankakee has overhauled and improved his elevator at Champaign, Ill., preparatory to receiving new grain.

Lee & Seitz, grain commission merchants of Kansas City, Mo., have dissolved partnership, Chas. S. Lee continuing the business.

An elevator is to be erected at Sleepy Eye, Minn., by a company which will carry on a grain business and deal in wood and coal.

The Winona & Dakota Grain Company of Winona, Minn., has bought the L. C. Porter Milling Company's elevator at Norwood, Minn.

Burglars entered the offices of C. T. Austin and W. E. Krelde, grain dealers at Tonica, Ill., July 24, but secured nothing of value.

The Simpson & Robinson Company has completed the 150,000-bushel elevator for the Star & Crescent Milling Company at Chicago.

The Northwestern Elevator Company is rebuilding its elevator at St. Thomas, N. D., which was destroyed by fire some time ago.

Plainview, Minn., wants a flax fiber factory, a starch factory and a brewery, good openings for which are said to exist at that point.

O'Connor & Whelan will erect an addition to their elevator at St. Thomas, N. D., which will increase their capacity to 30,000 bushels.

The Hunting Elevator Company of McGregor, Iowa, has erected an elevator at Wesley, where the company will carry on business.

The McFarlin Grain Company of Madrid, Iowa, is erecting a 5,000-bushel elevator at Luther. Power will be supplied by a gasoline engine.

Contracts have been let for the construction of two new elevators at Mapleton, Minn., which shall have a combined capacity of 160,000 bushels.

The Iron Elevator Company has purchased ground upon which to erect its elevator at Toledo, Ohio, and work will be commenced in a few days.

It is reported that a first-class elevator is to be erected at Canton, Ill., which will be equipped with corn sheller, grain cleaning machinery, etc.

Bender Bros., dealers in grain, coal and live stock at Spencer, Iowa, have erected a \$2,500 elevator at Wesley, where they will maintain a branch of their business.

The Pacific Coast Elevator Company has commenced the erection of a 50,000-bushel elevator on the narrow gauge road near Walla Walla, Wash. The company has also erected elevators of similar size at

Whitman Station, Valley Grove, Guy, at the state line on the O. R. & N.; at Harberts and at Menokin, Columbia County.

McCaul, Webster & Co., grain dealers of Aberdeen, S. D., have engaged in the grain business at Dell Rapids, where they have leased a warehouse.

A. E. Hutchinson, a wealthy farmer, has bought for \$1,000 O. M. McIntyre's grain buying business at Harmon, Ill., where he has commenced business.

The grain dealers of Quincy, Ill., F. F. Thomas and McNay & Hendricks, are reported to be doing good business, being kept busy handling new grain.

Albert Canfield is buying grain at Los Olivos Cal., and expects to handle 100,000 sacks this season. He recently shipped out a trainload of 4,000 sacks.

D. M. Dorman, formerly of Binghamton, N. Y., has formed a partnership with Clarence T. Angers at Dresden and will engage in the grain business.

J. Q. Adams & Co., grain dealers of Minneapolis, have established a branch office at Belview, Minn., where R. A. Turrell is buying wheat for them.

A large brick grain warehouse will be erected at Heinlen Switch, Lemoore, Cal., but it will not be finished until next year, according to M. Heinlen.

The Empire Elevator Company is building a warehouse at one end of the elevator at Corona, S. D., and will have facilities for handling flax this season.

Flickinger & Smith have enlarged the driveway to their elevator at Elwell, Iowa, and made other improvements preparatory to handling new wheat.

The elevators at Pierson, Iowa, have been overhauled previous to the arrival of the new grain and the grain buyers are prepared for good business.

The firm of Parrish & Gunder, grain dealers at Homer, Ill., has been dissolved, J. H. Parrish having bought the interest of his partner, J. N. Gunder.

The Saline Grain Company has been incorporated at Slater, Mo., with a capital stock of \$2,000, by L. S. Mead, J. A. Robertson, J. E. Bridges and others.

The Albert Schwill elevator of 500,000 bushels' capacity at South Chicago, which was erected by the Simpson & Robinson Company, has been started.

William Dalrymple, son of the famous bonanza farmer, has opened a grain office at Duluth, Minn., where he will engage in the commission business.

The new elevator which Bauman Bros. of Milwaukee are erecting at Waukesha, Wis., is about completed. It will have a capacity of 300,000 bushels.

Samuel Lord, formerly of the Louisville Banking Company, has purchased a part interest in the grain commission firm of Haggart & Co., at Louisville, Ky.

The four steel storage tanks recently erected by the Cornelius Mill Furnishing Company for the St. Louis Milling Company have a capacity of 115,000 bushels.

The Dean Grain Company has been incorporated at Coffeyville, Kan., and will buy grain at a number of stations along the line of the Missouri Pacific Railroad.

Mr. Fred. Bloom recently tried to sell 1,000 bushels of hypothecated corn to Grain Buyer Steiner at Mackinaw, Ill. He was arrested and held to the grand jury.

The G. M. Brush Grain Company has been incorporated at Chicago with a capital stock of \$25,000, by W. Irving Osborne, Albert S. Lauer and Arthur F. Leslie.

The Dodge County Milling Company is building a 13,000-bushel elevator at Redwood Falls, Minn. It will be 24x28 feet in size and will be run by a gasoline engine.

J. O. Smith, an old-time grain man of Kansas City, Mo., has returned from California and opened a grain office in that city, where he was welcomed by many friends.

James D. Downey, grain dealer and elevator man of Indianola, Ill., has completed an addition to his elevator and has added improvements and put in new machinery.

L. E. Heaton has sold a half interest in his grain and stock business at Pierson, Iowa, to his brother, W. P. Heaton, and the new firm is now carrying on business.

The Grand Trunk transfer elevator at Valparaiso, Ind., which has a storage capacity of 100,000 bushels, has been completed by the Simpson & Robinson Company.

The Rockford Glucose Company's factory at Rockford, Ill., which has been idle for several years, has resumed operations. It consumes 18,000 bushels of corn daily.

C. F. & G. W. Eddy, commission dealers in grain, etc., at Boston, Mass., failed recently for upward of \$1,500,000. The company had been in the business for a number of years, under the firm name of C. F. Eddy

& Co., in West Newton, Mass., then in the grain exporting business at Boston. They had been speculating in corn, which was the cause of the failure.

The Bethalto Grain Company has been incorporated at Alton, Ill., with a capital stock of \$8,000. Incorporators, W. K. Stanard, W. B. Pierce and W. D. Sparks.

L. L. Taylor, dealer in grain and seeds at Earlville, Ill., has managed his elevator at that place with great success since 1877. He was the pioneer business man of the town.

It is reported that F. H. Peavey & Co. of Minneapolis will build several houses in South Dakota this fall. A 15,000-bushel house is now being completed at Salem, S. D.

E. S. Woodworth & Co., large handlers of grain and mill feed at Minneapolis, will erect some time in the future a large elevator especially adapted for handling coarse grain.

The A. P. Dickey Mfg. Company has put in its overblast in elevators at Gladbrook, Iowa, for Henderson Bros., and at Algona, Iowa, the second machine for J. J. Wilson.

The Hathaway-Keith Grain Company has been incorporated at Mexico, Mo., with a capital stock of \$5,000, by W. S. Hathaway, W. T. Keith and V. F. Morris.

James Austin, grain and produce dealer of Winnebago City, Wis., received the \$50 premium for sending the first carload of new wheat to the Minneapolis market this season.

K. LeCompte, who was in the grain business at Kansas City, Mo. some years ago, but is now located at Concordia, Mo., is thinking of again opening an office at Kansas City.

The Davenport Elevator Company has been incorporated at Davenport, Iowa, with a capital stock of \$10,000, by John F. Dow, S. F. Gilman, A. H. Lamp and C. Hagedorn.

W. E. Hamilton, grain merchant of Williamsport, Ind., has completed two large cisterns from which he will obtain water for the steam plant and use in case of fire at his elevator.

George Merrill, grain and lumber dealer at Highview, Iowa, has bought an additional elevator and has moved his old one alongside of it, and now has a capacity of 25,000 bushels.

The new elevator, mill and storehouse being erected at Haverhill, Mass., are about completed. The elevator is 70 feet high, has slate roof and sides of zinc in imitation of clapboards.

E. H. Hart & Co., dealers in grain, seeds and hides at Dodgeville, Wis., have dissolved, W. B. Weekly retiring. Mr. Hart will continue the business under the firm name of Hart & Co.

Turner & Brennen, grain dealers of Wayne, Neb., who control elevators in different parts of the state, intend to erect an elevator at Wakefield, Neb., work on which will soon begin.

The Wallaceburg Flax Company, Wallaceburg, Ont., has been incorporated with a capital stock of \$10,000, to produce articles manufactured from flaxseed, etc. A flax mill has been built.

The elevators belonging to McElrath & Smith and W. L. Sanborn, grain dealers of Moline, Iowa, have been overhauled and given necessary repairs preparatory to handling new grain.

The Toledo Grain Company of Rushville, Ind., has been dissolved, M. C. Burt and Milton Churchill retiring. M. L. Moore & Co. have succeeded to the business and will run the elevator.

Ex-Sheriff John McQueen began suit recently against Martin L. Sweet for \$2,000 alleged to be due him as a partner in the grain business of M. L. Sweet & Co., at Grand Rapids, Mich.

It is said that a large elevator will be erected at Leavenworth, Kan., by the Burlington Railroad. The project was said to have been under consideration last year, but it did not materialize.

The R. H. Faucett Mill Company will erect an elevator at St. Joseph, Mo., to cost \$5,000. It will be on the Rock Island track and connected with the flour mill by a bridge over the track.

The Samuel Phillips Company has been incorporated at Baltimore, Md., with a capital stock of \$10,000, by Jas. J. Swaine, Samuel Phillips, F. N. W. Smith and Wm. E. Phillips. The company will conduct a grain business.

The Commercial Transportation Company has been incorporated at Superior, Wis., with a capital stock of \$50,000, to conduct a general grain shipping business. The incorporators are: J. D. Butler Jr., C. N. O'Hare and H. S. Butler.

The A. H. Thaxter Company has been formed in Bangor, Maine, for owning and operating a grain elevator and grist mill, doing a general grain, feed and flour business, etc. The amount of capital stock is \$75,000. The officers of the company are as follows:

President, A. H. Thaxter; treasurer, Storer W. Thaxter; directors: A. H. Thaxter, H. P. Oliver, Frank Hight, W. S. Higgins and Storer W. Thaxter.

E. Lawson and W. H. Gramlich have formed a partnership in the grain business at Kenton, Ohio, and will operate elevators at Kenton and North Kenton, dealing in grain, seeds, coal and salt.

The "local grain exchange" of N. P. Harrison & Co. at Rockford, Ill., which did business through the Chicago Board of Trade firm of F. G. Logan & Co., recently closed on account of light business.

As an inducement to trade to come in the right direction the Buschman Hay & Grain Company of Canton, Ill., has offered free ferriage on all loads of wheat of 40 bushels or more coming across the river.

The Charles Canning Grain Company of Duluth, Minn., has amended its articles of incorporation so as to change its name to the J. A. Todd & Co., and increasing the capital stock from \$20,000 to \$50,000.

J. F. Pearson, formerly of Hedrick, Ind., where he carried on a successful grain and coal business, writes us that he is building an elevator at West Lebanon, Ind., and will have it in operation about October 1.

Comstock & Siessman's large grain elevator at Clyde, Ohio, is completed and in full operation. As a novel drawing card the firm offered \$1 per bushel for the first load of grain received at the new elevator.

The Lake of the Woods Milling Company has decided to increase the capacity of the elevators it is now erecting in Manitoba to 40,000 bushels each. The action was taken on account of the abundant crops.

The Bloomfield Elevator and Milling Company has been incorporated at Bloomfield, S. D., with a capital stock of \$80,000, by A. T. Nation of London and H. G. B. Swinhoe and Harry Eller of Yankton, S. D.

Curtis Shepard, ex-agent of the Inter-State Grain Company of Argusville, N. D., was arrested recently, charged with the embezzlement of \$400 or more. He was placed under \$800 bonds to appear at the November term of court.

W. G. Beach, formerly of the grain brokerage firm of Duncan, Hollinger & Co. has been held to the district court for trial on the charge of embezzling the money of his firm. It is said that something like \$17,000 has disappeared.

The Simpson & Robinson Company have just completed a large contract for the Chicago Dock Company's elevator, which is operated by the Albert Dickinson Company. The improvements consist of marine leg conveyors.

Wesley Davis, the grain dealer who disappeared from Roseville, Kan., several weeks ago leaving debts to the amount of \$40,000, has returned to effect a settlement with his creditors, many of whom are farmers that he bought grain from.

R. R. Smith writes us that he has withdrawn from the firm of Smith, Patton & Co., dealers in grain, seeds and coal, and has purchased all the firm's property at Orchard, Ill., where he will carry an extensive business in the same lines.

The Brooks-Griffiths Company has begun the erection of a 75,000-bushel elevator at Minneapolis. It will be designed especially for handling coarse grain, an oat clipper being about the only machine used. It will be completed by September 1.

The Pollock Bros. Grain Company of Collison, Ill., has opened an elevator at Tuscola, Ill., recently purchased of Murphy & McNeill, which is in charge of Ed. Murphy. Pollock Bros. own and operate five other elevators along the C. & E. I.

The Interstate Grain Storage Company has been incorporated at Fostoria, Ohio, with a capital stock of \$65,000. It has leased from the Isaac Harter Company an elevator and four fireproof steel grain storage tanks with a capacity of 1,044,000 bushels.

Pollock Bros' elevator at Danville, Ill., is being supplied with new scales and a new office is being erected to take the place of the old one, which will be moved on a flatcar to Fairmount, Ill., at which place Pollock Bros. intend to buy grain this season.

H. G. De Pledge and O. E. Young have formed a new grain company at Pullman, Wash., and have leased the line of warehouses formerly owned by the Cheatham-Baker Company at Garfield, Colton, Genesee, Kendrick, Juliaetta, Pullman and Granite.

James Stewart & Co. of St. Louis and Buffalo have been awarded the contract to erect for the Delta Construction Company of New Orleans a 750,000-bushel elevator, cotton warehouse and storage yards at the company's terminal at Point Chapelette.

The Simpson & Robinson Company has secured the contract of the Chicago O'Neill Grain Company for a 1,250,000-bushel elevator to be built adjacent to the cleaning house erected by the same company last year. It is to be completed by October 20.

Tromanhouer Bros. of Minneapolis have been awarded the contract for the erection of the Burlington Elevator Company's house at St. Louis, Mo. Work has already been commenced and the elevator will be completed by December 1. It will be one of

the finest elevators in the United States and will cost \$250,000. Its dimensions will be 98x333 feet and 150 feet high. There will be 16 elevator legs, and the capacity of the elevator will be 1,250,000 bushels.

C. A. Bamber, elevator contractor and builder, writes us that he is building a 20,000-bushel elevator at Buffalo Center, Iowa, for R. R. Lequin, and that he will at once commence another of the same capacity for T. S. Livermore, late of Granada, Minn.

R. K. Johnson, grain merchant of Valparaiso, Neb., wants to build an elevator between that city and Brainard on the Republican Valley Railroad. The railroad objects and Mr. Johnson will apply to the Board of Transportation for the right to build.

The Royal Elevator Company has been incorporated at Minneapolis, Minn., the amount of capital stock being fixed at \$100,000 and the limit of indebtedness at \$150,000. The incorporators are: George C. Bagley, C. M. Case and F. B. Wells, all of Minneapolis.

Bartlett, Kuhn & Co.'s elevator at Terre Haute, Ind., which was burned recently, is to be rebuilt with 500,000 bushels' capacity. Justus Riehle is preparing plans. The house will be built so as to load and unload simultaneously from four different tracks.

Hon. Eli Hawks has leased his grain elevator and grain business at Juneau, Wis., to Charles Mann, grain buyer and city clerk at Mayville. In 1862 Mr. Hawks started the business at Juneau, which he has carried on continuously and successfully ever since.

The Superior Grain Company has been incorporated at Superior, Wis., with a capital stock of \$25,000, to deal in grain, feed, flour, etc., and own and operate elevators and mills. The incorporators are: T. G. Alvord, D. F. McLaughlin, R. Smith and S. D. Seavey.

An elevator is to be built at Bradley City, Ill., at a cost of \$5,000, for which a stock company is being formed. In connection with the elevator a general store will be conducted and farmers' trade will be attracted by checking wheat through it when possible.

The W. D. Harry Grain Company has been incorporated at McPherson, Kan., with a capital stock of \$6,000. The directors are: W. D. Harry and W. G. Harry of Conway, B. F. Stephens of Canton, C. W. Bachelor of McPherson and J. W. Crawford of Little River.

The Hills Mercantile and Elevator Company has been incorporated at Hills, Minn. The officers are: President, G. Anderson; vice-president, Nels Jacobson; secretary, F. B. Myrick; treasurer, O. G. Qualby. The contract has been let for the erection of a 10,000-bushel elevator.

The S. A. & J. H. True Company has been organized at Portland, Me., with a capital stock of \$10,000, of which \$3,000 is paid in. The company will carry on a general grain, flour and feed business. The officers are: President, S. A. True; treasurer, R. S. Laughlin.

Several Board of Trade men at Kansas City, Mo., were mulcted out of small sums of money by one Wisner, who claimed to be a brother of a member of the firm of Wisner & Co., grain merchants of Birmingham, Ala. He secured drafts from different persons and disappeared.

H. H. Spaulding, who formerly did business in Rochester, N. Y., as grain and stock broker, was recently arrested, charged by George Leshner of Albion with grand larceny by misappropriating \$4,500 which was given him to invest. He was released on account of lack of evidence.

The Whitmore Bros. Company has been incorporated at St. Paul, Minn., with Francis C. Whitmore, Sidney C. Troost, Minneapolis, and Nicholas Gales, Hillsboro, N. M., named as incorporators. The concern will have a capital stock of \$25,000, and will do a general grain business.

W. R. Mumford & Co., grain commission dealers of Chicago, have brought suit against Stanley and William McGrew, millers of Georgesville, Ohio, to recover \$825 for 1,000 bushels of wheat shipped to them. After defendants had ordered wheat went up and they refused to pay for the car.

The work on Lloyd Swan's new elevator at Wadena, Ind., is finished and he is receiving grain. It has all the modern improvements and conveniences needed, a peculiarity being that there is no corn sheller. Mr. Swan says that not a carload of ear corn is received at that station in a year, the farmers doing their own shelling.

The Texas Cotton Seed Meal and Oil Company has been incorporated at Kansas City, Mo., with a capital stock of \$2,000. The stockholders are: W. G. Peters, J. L. Grider, H. D. Seavey, H. Fiersheim and J. P. Fallon. The company will buy and sell cottonseed meal and oil, hay, grain and other agricultural products.

T. S. Gilliland, proprietor of a large grain warehouse at Van Wert, Ohio, where he has carried on a grain and produce business for 30 years, made an assignment recently, his assets being valued at \$40,000, fully covering all indebtedness. Mr. Gilliland is one of the best-known grain men in Ohio. He never

speculated, and his failure is due to a fire, dishonest employes and a run of misfortune. He expects to continue in the grain trade, managing the business of his sons, Dr. A. B. and L. G. Gilliland.

The firms of Knauf, Tesch & Jones and the Berger-Gallogly Company of Chilton, Wis., have consolidated. They are two of the leading mercantile and grain-buying firms in that city. Berger and Knauf each purchased the interests of their partners and the firm will be known as Knauf & Berger.

Martin Casperson reports that he has contracts to build three grain elevators for F. L. Watters, miller of Morton, Minn. A 30,000-bushel house will be erected at North Redwood; the location of the other two, one 40,000 bushels' and the other 60,000 bushels' capacity, has not yet been decided.

Ira Washburn of North Redwood, Minn., agent of the Great Western Elevator Company, has been dismissed from the service of the company, the latter claiming that Washburn is short in his accounts between \$1,100 and \$1,200. Washburn has confessed to the shortage, but says that it is only between 800 and 900 bushels of wheat. The shortage covers a period of two years.

Extensive arrangements are being made among elevator men at Mapleton, Minn., for handling the new crop. C. G. Spaulding and Starkey & Ketzback each have new elevators of 25,000-bushels capacity under construction, while the Hyde Elevator and Cargill & Co. have made arrangements to do likewise, so that the elevator capacity of that station will be in the neighborhood of 160,000 bushels.

L. W. McGlaulin, the Fair wheat broker of San Francisco, Cal., recently began suit against his former partner, L. C. Bresse for the recovery of \$27,000 as commissions on that deal. He did not push it, however, and it is said that a compromise has been effected. Mr. McGlaulin says he has been robbed and only wishes to get his own money back. His bookkeeper, Smith, has not yet been found.

A. B. Robbins and T. B. Walker of Minneapolis, and others, have formed a company and have purchased the elevator system of the Minneapolis and Dakota Elevator Company, which comprises 42 houses on the Great Northern Railroad with a capacity of about 1,500,000 bushels. Mr. Robbins had been for many years general manager of the Northwestern Elevator Company and he holds the same position in the new company in which he is the principal stockholder.

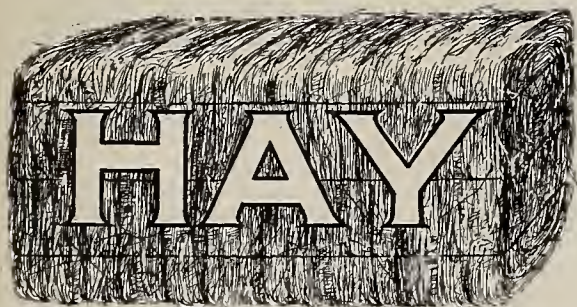
The Wisconsin Grain and Elevator Company has been organized at Milwaukee, Wis., with a capital stock of \$100,000. The officers are: C. C. Rogers, president; John S. George, vice-president and secretary, and C. E. Lewis, treasurer. The company will take charge of the Angus Smith elevators, which have a storage capacity of 2,150,000 bushels of grain, two-thirds of the total storage capacity in the city. In addition to the incorporators several business men in Chicago, as well as others in Milwaukee, are stockholders. The new company will manage the elevators as they have been run by the Smith company, handling the grain for the Chicago and Northwestern Company. This deal marks the retirement of Angus Smith from active business. He is also negotiating to dispose of his mining interests.

THE UNITED ELEVATOR COMPANY.

The affairs of the United Elevator Company of St. Louis are being slowly unraveled. The most important recent move was the election of new officers at a meeting held July 17. The old board of directors met and adjourned and the stockholders then held a meeting for the purpose of reorganizing. At this meeting W. T. Anderson, formerly president of the Farmers' Elevator Company, was elected president, Hugh Rogers vice-president, and H. S. Potter was appointed temporary secretary.

At a business meeting of the new officers it was decided to close four elevators, the Union Depot, the Venice, the Merchants' and the Central "A." Another shortage of grain was discovered on August 2. This time it was corn, to the amount of 25,000 bushels, and it was also found that there was a large amount of corn of a lower grade than was supposed in one of the elevators. The stock of the company has gone as low as \$18 per share, but the affairs of the company are now being managed on an economical basis, and no doubt its greatest troubles are over. The suit brought against D. P. Slattery for an accounting is yet to be settled. He is charged with converting to his own uses \$232,063 of the company's assets.

Particular attention must be directed to barley to see that it is not thrashed before passing through the sweat. Barley thrashed from the shock before sweating will commence heating in the car and arrive out of condition. These large elevators cannot offer facilities for handling small quantities to keep it from spoiling, and buyers will not be in the market for grain in that condition, and the result to shippers will be a heavy loss.—Market Record, Minneapolis.



The Cincinnati Chamber of Commerce has made the hay inspection fee 50 cents a carload.

Moses C. Nixon of Omaha, Neb., has invented a hay press which he has had patented in Canada.

W. J. Pearce of Pilot Point and A. L. Bennett of Dallas, Texas, have patented their new hay press in Canada.

A. J. Drew, hay and feed dealer of Minneapolis, assigned recently, with assets at \$3,268.45 and liabilities at \$22,531.09.

J. H. Hermes & Co.'s hay and feed warehouse was destroyed by fire July 17. The loss on hay and oats consumed amounted to \$20,000; insurance \$2,500.

In consequence of the shortage in hay New England dairymen are looking about for something to feed their cattle during the winter. The man with a feed mill will be consulted.

It is reported that the hay crop in France, which was recently harvested, was so good in quality and quantity that prices have declined to one-half the prices of 1894 and one-fourth those of 1893.

Here is a departure for the ambitious statistician. Let him estimate how many dollars per year hay dealers lose from the habit of men in general of pulling a piece of hay or straw from a bale and proceeding to eat it.

A man giving himself out as J. D. Eaton, grain dealer of Cortland, N. Y., and who has been operating in other towns, has been defrauding hay men of Van Etten, N. Y. His plan is to buy hay and pay for it with checks which are no good.

Indiana, Ohio, Illinois and Southern Wisconsin, as a general thing, supply Chicago with hay. In all these states the crop is a total failure. In Iowa the crop is fair, while in Minnesota it is the best that has been raised in that state for many years.

A remedy has been found for the dreaded Russian thistle. In Sherman County, Kansas, it has been found to make good hay, and will now doubtless have to be highly cultivated to grow at all. Mules are said to relish and thrive on the new hay.

It is reported that the hay crop in the province of Quebec between Montreal and Quebec, on both sides of the St. Lawrence, has been gathered in splendid condition, and although the yield will be below the average in some sections, on the whole it will be a good one, both as regards quantity and quality.

It will never do to bale hay in an indifferent manner. The trade demands a reformation of the old practice of slinging hay together in any kind of a bundle and rushing it to market. It is most important that all perpetual or small bales have three wires, not two.

How do you mark your bales? The chief hay inspector of New York City says that when bales are marked by a strong cardboard or wooden tag placed under the wire on the end very few get lost, but when placed on the side it is both inconvenient and unsafe, as many are lost.

The hay commission merchants in Paris, France, make agreements with farmers only verbally, no written contract being given, but, nevertheless, says an admirer, both parties fulfill their engagements most scrupulously, whatever may be the fluctuations of the market. Evidently there is a difference between French and American human nature; we manage to get along with one or two written contracts.

In New Hampshire the season has been the worst for several years for hay-making, yet farmers rely so confidently upon their facilities for rapid work that little hay has been seriously injured. They take fewer chances than formerly, and when a good hay day comes out early, and in light grass get in the same day; in heavy cock up at night, open the next morning, if the weather is clear, and get in before night.

In a vein of gentle admonition a hay dealer gives this advice to shippers: In loading a car put the best hay at the door, and see to it that only the ends show out; they look best. If possible pick out a leaky car, as the hay once wet will increase in weight in transit and bring you in more money. If you are so unfortunate as to be unable to secure a leaky car, just before the hay leaves the point of shipment let the fire department practice on it. This will have ultimately

the same effect. Mix up as many grades in a car as you can secure, remembering the old adage that "variety is the spice of life." By doing this you will make the receiver or commission man earn his money, particularly if you put the best hay in at the doors.

Canadian hay men who ship to New York complain that the inspection there is impracticable, inasmuch as clover is not considered tame grass and is not admitted in No. 1 and No. 2 Timothy. It is suggested that the New York Produce Exchange rules be modified or new ones established for the inspection of Canadian hay. Canadian dealers say that as it is at present the great bulk of the best hay in Canada will only grade No. 3.

The first hay press ever in Quitman County, Mississippi, was set up there a few days ago. This seems an odd thing in one of the oldest agricultural regions of the country, but the explanation is in the fact that hitherto the land thereabouts, as in many other regions of the South, has always been devoted solely to the growing of cotton. But this is one indication of the growing tendency of Southern farmers to diversify the crops where it is possible to do so.

There seem to be many evil practices in the hay trade of Canada, especially in its connection with the railways. The latest maneuver brought to light is shippers of hay from Canada to Boston for export obtaining an advantage over others in this way: Upon the hay arriving at Whitehall, N. Y., it is loaded into railway cars of 26,000 to 28,000 pounds' capacity and billed and handed over to ocean steamers at Boston as containing 20,000 pounds, the shippers paying freight on about two-thirds of the hay they ship, making a gain of over \$1.50 per ton over the profits of their honest competitors. For the sake of all legitimate business such practices should be investigated.

BREAKING CONTRACTS.

Considerable annoyance has been caused by farmers refusing to deliver hay which they sold to dealers here at a certain price. For instance, one farmer sold 12 cars of baled hay at \$7 f. o. b., at a country station, to be delivered at a certain date; but when the buyer went to take delivery of same and pay cash therefor, the farmer coolly informed him that he could not have it, as he had sold most of it at an advance of \$2 per ton. "But I bought it from you at \$7," rejoined the disappointed buyer. "Well, supposing you did," said the farmer, "do you think I would be such a darn fool as to refuse an offer of \$2 per ton more than you were willing to give?" This farmer seems to have had a rather loose idea of business principles, when he would sell goods at a stipulated price to be delivered, and then deliberately sell them to another party because the latter bid a higher price. But this appears to be a common practice among a certain class of producers.—*Trade Bulletin, Montreal.*

IMPORTS AND EXPORTS OF HAY.

According to the last report of the Bureau of Statistics, hay aggregating 26,858 tons, valued at \$187,948, was imported in June, against 13,298 tons, valued at \$112,249, imported in June preceding; and during the twelve months ending June 30, 201,900 tons, valued at \$1,433,716, were imported, against 86,784 tons, valued at \$761,940, imported during the corresponding months ending with June preceding. Of imported hay we exported none in June or in June preceding, and exported 45 tons, valued at \$380, during the twelve months ending with June 30, against 229 tons, valued at \$2,026, exported during the corresponding months ending with June preceding.

We exported 3,341 tons of domestic hay, valued at \$52,536, during June, against 3,999 tons, valued at \$67,644, in June preceding; and during the twelve months ending June 30, 57,081 tons, valued at \$699,029, were exported, against 54,446 tons, valued at \$890,654, exported during the months preceding.

REDUCED RATES TO BOSTON.

The Michigan Central, "The Niagara Falls Route," has arranged to sell on August 19 to 25 inclusive to Boston and return at the low rate of one fare for the round trip, passing Niagara Falls, going down the Mohawk Valley, passing through the Berkshire Hills and across the Connecticut Valley to Boston by the most direct route or by a great variety of other routes from which the passengers may select, embracing the most beautiful and picturesque scenery of the East, and including among them the Thousand Islands and St. Lawrence River, the Green Mountains of Vermont, the White Mountains and lake region of New Hampshire, Portland and the New England Coast, the incomparable Hudson River and the famous Fall River Line as well as the rail lines between New York and Boston. These are all described in an illustrated itinerary which will be sent upon application.

O. W. RUGGLES, General Passenger and Ticket Agent, Chicago. No. 665.

K. H. Bates & Co. have been sued for the value of a carload of oats by E. Hanningher at Omaha, Neb., for which it is alleged they did not pay.

ITEMS FROM ABROAD

The flaxseed yield of India is reported officially at 445,000 tons, against 825,000 tons in 1894.

It is reported that continuous rains have ruined the rice crops in many parts of Japan, and a famine is feared.

Russia is carrying out its plans to assist the grain trade, and the government has bought so much that it will soon hold most of the grain in the country.

The *Review of the River Plate* of June 29 says: Wheat and flaxseed are showing above the ground in some of the Santa Fe colonies, but in others wet weather has prevented sowing.

The Ministry of Agriculture now reports that wheat in North Italy is abundant, but not so good in the south and center. This rather contradicts previous advices, both official and private.

A late consular report from Russia is to the effect that spring and winter wheat and the rye crop have suffered owing to bad weather. In some regions there is a good crop, while in others the outlook is very poor.

On August 8 the London *Times* published a report of the estimated condition of crops in England August 1 as follows: Taking 100 as the normal standard, wheat is placed at 78; barley, 86; oats, 80; potatoes, 95; beans, peas and roots, 75, and grass and hops, 74.

Exports of wheat from India during the twelve months ending March 31 amounted to 345,000 tons, as compared with 608,000 tons in the preceding twelve months, the proportion of exports to outturn being 5.4 per cent., against 14 per cent. and 8.8 per cent. in the previous two years.

From June 1 to 30 France imported 153,000 quarters of wheat of 480 pounds each and exported 2,000 quarters, importing 22,000 sacks of flour and exporting 6,000 sacks. From Aug. 1, 1894, to June 30, 1895, the exports of wheat (including flour) were 2,500,000, against 6,600,000 quarters in the same time in 1893-94.

From January 1 to July 19 the exports of wheat from Argentine amounted to 4,343,000 quarters of 480 pounds each, against 5,330,000 quarters in the same time in 1894, 3,216,000 in 1893 and 1,347,000 in 1892. In the same time shipments of corn amounted to 8,720,000 quarters, of 480 pounds each, against 469,000 quarters in 1892, very little in 1893 and none in 1894.

The Ministry of Agriculture of France issued a report on crops as follows: Taking the number 100 to represent very good and 80 good, the winter wheat crop on July 15 stood at 80, against 87 on corresponding date last year; spring wheat at 79.8, against 82. These figures indicate a total crop of about 37,500,000 quarters of 480 pounds each, compared with 41,700,000 quarters last year.

The United States Consul at Brussels writes that the Belgian Senate passed the new tariff bill on July 12. The government will fix by royal decree the date when the different provisions of the measure will go into effect. The new tariff on oatmeal flour and malt went into effect July 16, and is as follows: Oats, 77 cents and 2 mills per 230 pounds; other flour, including semolina, 28 cents 6 mills per 220 pounds; malt, 28 cents 9 mills per 220 pounds.

Official statistics of the rice crop of India for the year 1894 give the acreage as 6 per cent. above and the return 7.9 per cent. above the preceding season. The acreage was 49,813,300, against 49,525,300 in 1893; the yield in 1894 was 495,460,600 hundredweight, in 1893 459,119,400 hundredweight. During the nine months ending December 31, 20,318,450 hundredweight, against 14,515,282 hundredweight in the same time in 1893, were exported, and for the year ending March 31, 1894, 2,690,231,600 pounds, against 3,068,521,456 pounds in the same time in 1892-93, were exported.

OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

Geo. H. Dickey of the A. P. Dickey Manufacturing Company, Racine, Wis.

Fred Cranson of the Huntley Manufacturing Company, Silver Creek, N. Y.

George Cawthorne, representative of the Haskins Iron Works, Lake Geneva, Wis.

Jas. L. Wheeler of St. Louis, Mo., representative of the S. Howes Company, Silver Creek, N. Y.

CROP : CONDITIONS.

[Readers will confer a favor by sending us reports each month of the acreage and condition of growing crops, the amount of grain and hay in farmers' hands and stocks in store, for publication in this department.]

MANITOBA.—The crop of wheat is estimated at 30,000,000 bushels.

IOWA, BUFFALO CENTER, WINNEBAGO Co.—Crops are simply immense through this section of country. C. A. BAMBER.

RICE.—The coming rice crop promises to be one of the largest on record. The record is 1892, when total yield approximated 2,000,000 bags.

PENNSYLVANIA, GLENLOCH, CHESTER Co., August 7.—It is very dry here now and serious damage to the corn crop is threatened, but rain in a week or ten days will fix it all right. SAMUEL FETTERS.

MONTANA, SHERIDAN, MADISON Co., July 29.—The condition of wheat and oats is good. The yield will be 90 per cent. The acreage is small, about one-half of that sown last year. R. H. HERHOLD.

ONTARIO.—The *Trade Bulletin* of Montreal, August 2, says: Advices from the barley sections of Ontario along the Midland state that a pretty fair crop will be gathered, but the recent rains have stained most of it.

INDIAN TERRITORY, BARTLESVILLE, CHEROKEE NATION, August 10.—The wheat crop of this section is almost a failure. We had one-fourth of a crop until wet weather set in, which spoiled what was left. We have some old wheat yet. E. F. MCQUILLEN.

OATS IN CANADA.—Several samples of new oats have been shown us within the past few days which were nice, bright and heavy; but another sample contained a few sprouted kernels, which it is said resulted from the grain being laid by rains just before it was cut. *Montreal Trade Bulletin.*

MARYLAND, BELLE GROVE, WASHINGTON Co., August 9.—Farmers are about done thrashing and report a yield of half a crop. Fog and frost damaged the wheat on low ground and dry weather and fly on uplands. Corn is reported to be about 40 per cent. short. Wheat is of a fair quality. M. J. WHITFIELD.

BROOM CORN IN KANSAS.—All the information from Kansas indicates that the broom corn crop this year will be very large. Last year not a third of a full yield was harvested. The State Board of Agriculture's report made last year's crop 8,000 tons. The crop of 1893 was 25,000 tons. This year's crop is expected to be larger than that of 1893.

TEXAS, BONHAM, FANNIN Co., August 5.—I guess we are not in it any more. Our wheat is all rotten or sprouted. There will be about one-third of a crop. As to the average, it was cut a good grain with well-filled heads, but it was rained upon until it is impossible to make flour out of more than one-tenth of it. Mills will have to ship in wheat if they can find any. M. H. MITCHELL.

ONTARIO, ZIMMERMAN, HALTON Co.—The acreage here is much the same as last year. Wheat will be about two thirds of an average crop in this section. Spring crop of oats, peas and barley is a full crop; hay about one-half a crop. No stock in farmers' hands: last year about one-fourth of their crops. All kinds of old grain is well picked up; no old hay in this section. J. A. MCCARGAR.

MISSOURI.—J. R. Rippey, secretary of the State Board of Agriculture, reported August 2 as follows: Wheat damaged 9 per cent. in shock. Corn area, 110; condition, 108; estimated yield, 41 bushels. Oats area increased 2 points; yield, 30 bushels. Estimated yields for state: Wheat, 17,000,000 bushels; corn, 270,000,000; oats, 34,000,000; hay, 3,000,000 tons; tobacco, 7,000,000 pounds; potatoes, 10,000,000 bushels.

MICHIGAN, COLDWATER, BRANCH Co., August 1.—I have been obliged to run my mill on old wheat and have been buying very freely in Chicago, as there is none here. I expect to run largely on old wheat through August and September. I have no means of finding out how the new crop will compare with last year's wheat in flour-making quality, but it is my opinion that it will take at least 15 pounds more to make a barrel of flour than it did with 1893 or 1894 wheat. WM. A. COOMBS.

POTATOES.—The Agricultural Department has completed statistics which show a steady increase in the acreage devoted to potatoes since 1892 and that the increase this year over 1894 is 8 per cent., only seven states showing a decrease. Minnesota increases its acreage by one-third, and Florida, Iowa, North and South Dakota by one-fourth, while a large increase is shown in Maine, Nebraska, Rhode Island, Vermont, Arkansas, Maryland and Oregon. The general condition of the crop is 91½ per cent. on a basis of 100 per cent. as an ordinary crop. The general condition is decreased by low percentages from important producing states such as Illinois, where the condition is only 57 per cent., Indiana 70, Ohio 74 and Michigan 87. The cause was drought and later frost. The condition is reported low also in the Virginias, North Carolina,

Tennessee and Kentucky. On the upper Mississippi river (north of Illinois) and on the Missouri the reports are above normal; similarly in Arkansas and Texas. A large yield on a largely increased acreage is reported in Florida.

INDIANA.—The state crop bulletin for August 12 says: The dry weather of the last week hindered the growth of all crops, especially corn, potatoes, pastures and tobacco. General rains would add greatly to their value. Occasional rains have fallen, but have been badly distributed. Corn generally is in very good condition, and the prospect was fine for an unusually large and excellent crop until dry weather of the last week, which was not beneficial to its best development. It has suffered somewhat on good land, and is beyond the hope of recovery on "thin" land where the dry weather has been continuous.

OHIO.—The Ohio Department of Agriculture report for August 1 gives average condition of crops in comparison with a full average, as follows: Wheat, 59; oats, 68; timothy, 40; potatoes, 60; tobacco, 56; pastures, 43; apples, 67; peaches, 31; pears, 71; grapes, 22. The report says: The result of the wheat harvest verifies former estimates, and still indicates that the crop, as a whole, is but little better than half an average one. In many localities the ravages of chinch bugs have been alarming, working from wheat to oats, then to corn and millet. Corn, however, has made fairly good improvement the past month, and while not evenly distributed over the state, the crop now promises well. Oats were a light crop, while timothy hay was the poorest for many years.

SOUTH DAKOTA, YANKTON, YANKTON Co., July 29.—I am unable to give the number of acres in crops in this county, but as compared with last year I would estimate the increase in acreage at about 10 per cent. As to the condition of crops, they are very fine. I have seen a good many good crops grown and gathered in this county during my residence of 28 years, but I think, taking the whole country together and all kinds of crops, this year will equal and probably exceed any year since the country was settled. The small grain is all or nearly all cut, and is going into the stacks in fine condition. The recent heavy rains have made a heavy corn crop almost an assured thing. There is very little old grain in stock or in the hands of farmers in this vicinity. E. MINER, Supt. Fountain Roller Mill.

MISSOURI, MILL GROVE, MERCER Co., July 29.—Harvest is over in this part of Missouri and most of the wheat has been thrashed. The acreage is very large. Average yield will be about 10 bushels per acre, quality poor, about No. 3 grade. Oats are fair in quality and will grade about No. 2. Average yield about 40 bushels per acre. Most of the rye is fair, No. 3, average of 17 bushels per acre. Acreage rather large in Mercer County. Hay is about two-thirds of an average crop, of good quality. There are no records of such good prospects for corn as exist at present in this part of Missouri. There are more potatoes, and so far a better quality than has ever been raised here. Farmers will have plenty of grain and hay and grain to sell if the price is fair. There will be better times than for years. CHARLES HYLER.

MICHIGAN.—Secretary J. J. Hanshew gives the Michigan State Millers' Association report of the yield of wheat per acre in Michigan as obtained from thrashers' reports. The responses were numerous, full and explicit. Very little thrashing has been done in the northern part of the state. The lowest yields per acre reported were 2½, 3, 4, 5 and 6 bushels, from Ingham, Ionia, Ottawa, Shiawassee, St. Joseph, Branch, Lenawee and Kent Counties. The highest yields reported were 20, 25, 27, 30, 32, 37, 40, 42 and 52 bushels, from Kalamazoo, Ottawa, Lenawee, Washtenaw and Bay Counties and the Huron Thumb. Bay County and the Huron Thumb give the largest average yields per acre—18 to 40 bushels per acre. The general average of all reports is 14.22 bushels per acre. The crop report of the State Department July 1 gave the state average 9.88 bushels. Not more than one-half as much wheat was thrashed in July as in the same month last year. A greater amount than usual has been hauled into barns instead of being thrashed in the fields, and the straw will be generally used for fodder.

IOWA.—A conservative estimate places the acreage of wheat in the state at 754,908 acres, and the yield at 12,000,000 bushels. The Iowa crop bureau places the acreage of corn at 7,380,172 acres, the yield an average of forty bushels. There are 4,150,610 acres sown to oats in the state; estimating that the average will be forty bushels to the acre, the total yield will be about 166,024,400 bushels. There are 106,075 acres of rye in the state, which it is estimated will go twenty bushels to the acre. Barley will be harvested from 516,061 acres in this state, and it is reasonably certain that the yield will amount to at least eighteen bushels to the acre, which would make the total yield 9,282,098 bushels. The yield of hay of all kinds is estimated at 2,000,000 tons. The flax acreage is considerably less than in former years; but the yield will make up in a measure for the decrease in the acreage. It will run at least fifteen bushels to the acre, which is an extraordinary yield, and will make the total of the crop in the state 3,152,040 bushels. The acreage of potatoes is 124,987 acres and the yield will be almost unprecedented. From returns already in where the crop has

been harvested it is safe to say that a yield of 200 bushels to the acre will be a low yield. On this basis the total yield will be something like 24,997,400 bushels.

NEW YORK.—Wheat thrashing is being pushed and the yield is excellent, from 20 to 35 bushels per acre. Not as much sown last year as usual. Rye yields well also. The young clover is a failure; many fields of wheat stubble will be sown again to wheat. The hay crop was almost a failure, medium clover the poorest of any. Rains came and helped late grass and barley and oats. Oats and corn promise an immense yield.

MICHIGAN, August 9.—Estimates on the Michigan crop for August, issued by secretary of state, are based on more than 800 returns received since August 1. Wheat is estimated to yield an average of 10.91 bushels per acre. One year ago the estimates were for an average of 15.47 bushels. The reports as to quality vary greatly from the same and adjoining localities.

The number of bushels of wheat reported marketed in July is 437,804, as compared with 847,972 reported marketed in July, 1891, and the amount marketed in the twelve months, August-July, is 11,007,604 bushels, as compared with 15,146,278 bushels in the same months last year.

Oats are estimated to yield 22 bushels per acre in the southern counties, 23 in the central, and 17 in the northern, the average for the state being 21.

The average condition of corn is 79 per cent., comparison being with vitality and growth of average years; the potatoes are estimated to yield 70 per cent. of an average crop.

The estimated yield of hay per acre is only three-tenths of the yield in average years, and the condition of meadows and pastures is but 31 per cent. of condition in average years. Clover sowed this year is nearly an entire failure, the estimates showing condition but 13 per cent. of an average.

Apples promise scarcely more than one-fourth of an average crop.

ILLINOIS.—Reports received at the State Department of Agriculture confirm the rumors heard during the past few weeks as to the condition of the growing corn crop. The prospect now is for one of the largest and finest crops ever raised in the state.

Corn has suffered in some sections from the depredations of chinch bugs, but the damage as a whole is but slight. In some localities the corn fields adjoining wheat fields were quite badly injured, and in Southern and South Central Illinois these pests are now present by the million, and some fear is entertained that they may yet injure the crop. It is generally thought, however, that the crop is too far advanced to be in very great danger from them, though a few heavy rains are needed to reassure the farmers.

The August condition of corn has never been surpassed in Northern and Southern Illinois, where it is given as five points above the average, and in Central Illinois, where it is two points above the average, it has been exceeded but once in the past fourteen years—in 1888.

The area devoted to corn this year is 2 per cent. larger than in 1894, when 6,705,000 acres were reported by the assessors. This would give 6,837,000 acres as the area for this year, which, with the large yield per acre, which is now anticipated, will make the 1895 corn crop one of the memorable crops in the agricultural history of Illinois.

GOVERNMENT CROP REPORT.—The report of the Statistician of the Department of Agriculture on the 10th of the month relates to conditions as they stood on the 1st of the month. Thus understood, the returns show an improvement in the condition of corn about three points during the month of July from 99.3 to 102.5. The average for some of the large and principal states are: Ohio, 89; Kentucky, 113; Indiana, 100; Illinois, 106; Iowa, 107; Missouri, 115; Kansas, 90; Nebraska, 76; Virginia, 102; North Carolina, 98; Georgia, 108; Alabama, 99; Mississippi, 93; New York, 98; Pennsylvania, 90; Texas, 113.

The condition of spring wheat has fallen since last report 6.3 per cent., being 95.9, against 102.2 for the month of July. The condition by states is as follows: Michigan, 59; Illinois, 63; Wisconsin, 87; Minnesota, 102; Iowa, 111; Kansas, 60; Nebraska, 79; South Dakota, 91; North Dakota, 104; Washington, 75; Oregon, 94; California, 73.

The condition of oats has advanced 1.3 points since last report, being 84.5, against 83.2 July 1.

Spring rye conditions are 84, against 77 in July last, while barley has fallen to 87.2 from 91.9 in July; tobacco to 82.7, against 85.9 at that date, and 74.9 in August, 1894; rye 84.1, last year 91; apples 71.2, against 44 last year; peaches 83.3, against 22.3 last year; buckwheat has an acreage of 96.5 per cent. of last year, and condition 85.2. Area under hay 91.5 per cent. of 1894; condition of timothy 69.9, against 75.6 last year; product of clover 66.7, against 72.1, and the quality of clover 87.3, against 90.2 a year ago. Condition of pasture 77.8, last year 66. Irish potatoes, condition, 87.7, a fall of nearly 4 points from 91.5 in July.

John K. Comstock, C. D. Hughes and Jus'us G. Coates, a member of the Chicago Board of Trade firm of Comstock & Hughes, have been held to the Criminal Court in bonds of \$300. William T. Caton accused them of keeping a bucket-shop.

WATERWAYS

This season's receipts of grain at Buffalo up to August 1 have amounted to 37,664,586 bushels, nearly 7,000,000 bushels less than last year.

The steamer Benton sank in the Mississippi River near Boonville, Mo., recently. About 800 sacks of wheat stored in the hold were lost, but the deck load of about 3,500 sacks was saved.

During July there were 538 arrivals and departures of vessels from the port of Superior, Wis., against 130 in July, 1894. This is the largest number of any month in the history of the port.

In an article in the *Forum* for August, E. V. Smalley argues that Western farm products must have cheaper freight rates than railroads can give in order to compete with agricultural products in other parts of the world.

The Winifrede Coal Company of Philadelphia is negotiating with the Ohio Board of Public Works for the lease and improvement of the old Ohio Canal, transforming it into a ship canal, and it may in time be in operation from Portsmouth to Cleveland, Sandusky or Toledo.

A report of traffic on the Sault Ste. Marie Canal during the year ending June 30 gives the increase of the total freight traffic as 10 per cent. The amount of flour carried increased 10 per cent. while wheat fell off 3 per cent. In the operation and care of the canal \$50,968 was expended during the year.

Pessimistic lake vessel men saw a noticeably apparent fall in the lake levels three years ago and find no comfort in a fall of 20 to 25 inches this season, perhaps 4 inches more than last year. It might be accounted for by the fact that the rainfall over the great lakes region this summer is nearly 4 inches less than last.

The official statement of the traffic through the Sault Canal during July includes 2,726,289 bushels of grain, against 3,154,315 bushels in July, 1894, and 588,582 barrels of flour, against 788,790 barrels in July, 1894. The total tonnage during July amounted to 5,133,299, showing an increase of 1,766,777 tons over July, 1894.

The Maryland Board of Public Works has decided to advertise for bids for the sale of the state's interest in the Chesapeake and Ohio Canal. This action is due to the failure of a commission appointed through an act of the legislature of 1892 to investigate the facilities of the canal and suggest the advisability of selling failing to report in a satisfactory manner.

Steel vessels are taking the place of the wood hulls which have been engaged in traffic on the lakes. What it will be in the near future is seen in the fact that at the ship-building cities on the lakes a large number of steel vessels have been turned out this summer. Larger vessels will mean cheaper freight, and also the necessity for deep lake channels and harbors and deeper canals.

The next deep waterways convention will be held in Cleveland in September. One of the topics for discussion is the old proposition to dam Niagara Falls—that is, to raise the level of Lake Erie and thus deepen all its harbors by raising the level of the overflow of the falls. This would raise the general level of Lake Erie, but not affect the level of any of the upper lakes, because of the amount of fall in Detroit River.

It is officially denied that the New York canals have carried only one-half as much freight so far this season as in the same time in 1894. The returns up to the first week in July show that the falling off has not amounted to more than 10 per cent. Up to July 7, 1894, the total tonnage amounted to 1,255,216 and up to the same date this year 1,025,845 tons. Last year the canals were open nearly a week in advance of this season.

Gen. O. M. Poe's report of the progress of the work on the 20-foot channel connecting Chicago, Duluth and Buffalo states that the total expenditure so far has amounted to \$1,188,196. Contracts for the work expire next December, and it is said that the government will not be called upon to give much, if any, extension of time. This work has special importance for the grain trade and will be an advantage to every owner of a large vessel passing up or down the lakes.

Geo. W. Balch, chairman of the Canal Committee of the New York Produce Exchange, reckons that with the projected improvements of the Erie Canal freight could be carried at a profit 500 miles for 8 cents per ton. Regarding the depressed condition of the canal's business at present he said: "The railways have, within twenty-five years, by unstinted expenditures, narrowed the cost of their operation immeasurably, while the canals remain substantially as they were when last improved in 1862, and with the exception of, say, 75 steamboats, only a few of which are of the

best type, there has been no change in the mode of moving boats over that first employed 70 years ago."

Preliminary preparations have been made for the construction and equipment of an experimental line of four miles for towing boats on the Erie Canal by electricity. Along each side of the canal and outside of the towpath hollow steel poles 16 feet high will be erected. Two wire cables will be stretched on these poles, and the tow line will be attached to a small car or traveler running on the cables. The cost of the construction will be \$5,000 per mile. The experimental line will be completed in about two months. Immense difficulties lie in the way of the plan, and it is not at all certain that "the towpath is doomed."

PERSONAL

B. Miller is buying grain for a new firm at Quincy, Ill.

George Murray has charge of the Pioneer warehouse at Armona, Cal.

Captain Young has charge of Heinlen's grain warehouse at Heinlen, Cal.

D. P. Campbell has charge of L. Nathan's grain warehouse at Lemoore, Cal.

John Friant has charge of the Kutner Goldstein grain warehouse at Lemoore, Cal.

Nelson P. Harvey is now connected with Fallis & Co., grain dealers of Toledo, Ohio.

J. N. King has charge of the buying and shipping of grain for L. Nathan at Lethent, Cal.

Perry W. Lawrence of Garfield, Whitman County, Wash., has been appointed state grain inspector.

Isaac Cortelyou, grain dealer of Perth Amboy, N. J., was married June 12 to Miss Millie Poole of Brooklyn.

F. L. Stobie, who has been with the United Elevator Company of St. Louis for some years, has resigned.

J. B. Smith is handling wheat at Blanchard, Ohio, for Lawson & Gramlich, a new grain company of Kenton.

Albert C. Clausen has been reelected chief grain inspector of Minnesota, the term of office being two years.

G. M. Carlton, who has been in Minnesota for some time, has returned to Grover, S. D., and resumed wheat buying.

R. A. Turrell has been appointed grain buyer at Belview, Minn., for J. Q. Adams & Co., grain dealers of Minneapolis.

Geo. W. Fithian has been appointed a member of the Illinois State Board of Railroad and Warehouse Commissioners.

H. H. Ray, who was formerly engaged in buying grain at Earling, Iowa, is now in the employ of McCourtie, Hill & Co.

W. Seyk, miller and grain merchant of Kewaunee, Wis., is now buying grain at Ahnapee, having succeeded the late L. J. Conway.

C. F. Pool, formerly auditor for Harris Bros. & Co., has taken charge of their grain interests at Lincoln, Neb., the company's headquarters.

Louis Decker is buying grain at the Nathan grain warehouse at Lemoore, Cal., and expects to take in over 75,000 sacks during the season.

J. F. Geeslin, formerly of Winona, Minn., has gone to Groton, S. D., to take charge of an elevator for the Northern Grain Company of Minneapolis.

Edward Murphy, formerly of the firm of Murphy & McNeill, has taken charge of the Pollock Bros. Grain Company's business at Tuscola, Ill., where he will also carry on a coal business.

Joseph A. Morrell has taken charge of the Chicago O'Neill Grain Company's elevators and warehouses, 30 in number, on the Illinois Central Railroad. His headquarters will be at Cherokee, Iowa.

Thomas Corcoran, foreman for John Shea, the grain merchant at Lawrence, Kan., is on a month's vacation in the White Mountains. He will return about September 1, after visiting New York, Philadelphia and other places.

Geo. J. Morton, an experienced elevator man, has succeeded Gus Sunwall as manager of the Central Elevator Company of Minneapolis. Mr. Sunwall has been in charge of the Central Company's houses for twelve years, having superintended their erection. He intends to carry on a grain commission business and operate interior elevators.

SEED EXPORTS AND IMPORTS.

According to the last report of the Bureau of Statistics seeds valued at \$11,730 were exported during June, against an amount valued at \$11,900 exported in June preceding; and during the twelve months ending June 30 seeds valued at \$2,849,145 were exported, against an amount valued at \$7,942,221 exported during the corresponding months ending June preceding.

Clover seed aggregating 2,240 pounds was exported in June, against 530 pounds in June preceding; and during the twelve months ending June 30, 22,905,672 pounds, valued at \$2,124,997, were exported, against 45,418,663 pounds, valued at \$4,540,851, exported during the corresponding months ending with June preceding. Cottonseed to the amount of 964,711 pounds was exported in June, against 86,540 pounds exported in June preceding; and during the twelve months ending June 30, 11,051,812 pounds, valued at \$86,695, were exported, against 5,419,056 pounds, valued at \$41,866, exported during the corresponding months ending June preceding.

There were 2 bushels of flaxseed exported in June against 2 bushels in June preceding; and during the twelve months ending June 30, 1,324 bushels, valued at \$1,433, were exported, against 2,047,836 bushels, valued at \$2,426,284, exported during the corresponding months ending with June preceding.

No timothy seed was exported in June and none in June preceding; and during the twelve months ending June 30, 4,939,237 pounds, valued at \$277,160, were exported, against 10,155,867 pounds, valued at \$449,207, exported during the corresponding months ending June preceding.

Other seeds aggregating an amount valued at \$5,483 were exported in June, against an amount valued at \$5,887 exported in June preceding; and during the twelve months ending June 30 an amount valued at \$358,860 was exported, against an amount valued at \$484,013 exported during the corresponding months ending June preceding.

Flaxseed aggregating 453,982 bushels, valued at \$408,915, was imported in June, against 175,190 bushels, valued at \$164,968, imported in June preceding; and during the twelve months ending June 30 4,166,223 bushels, valued at \$4,554,485, was imported, against 592,820 bushels, valued at \$701,866, imported during the corresponding months ending June preceding.

Other seeds valued at \$41,722 were imported in June, against an amount valued at \$63,075 imported in June preceding; and during the twelve months ending June 30 an amount valued at \$2,081,096 was imported, against an amount valued at \$1,693,737 imported during the corresponding months ending June preceding.

THE LATEST SENSATION.

Surprisingly low rates have been offered by the Nickel Plate Road to Boston and return during Knights Templar Conclave and a choice of forty routes. Tickets on sale August 19 to 25 inclusive; longest return limit; service strictly first-class. Sleeping car space reserved in advance. For further information address J. Y. CALAHAN, General Agent, 111 Adams street, Chicago, Ill. No. 82.

It is said that while there will be a heavy movement of flaxseed in the Southwest this season the grade will be poor on account of the damp weather which has prevailed in many sections.



ENTERPRISING MINNESOTA FARMER - I'm glad to see you and hope we shall be better acquainted.—St. Paul Pioneer Press.

Fires, Casualties, Etc.

The Goodenow Elevator at Goodenow, Ill., burned recently.

Two warehouses at Boonville, Mo., were blown down in a wind storm July 30.

The West Elevator at Beaver Crossing, Neb., was destroyed by fire July 8.

S. W. Hale's elevator at Geneva, Ill., was destroyed by fire recently. Loss \$10,000; insurance \$2,500.

Johnny Jones, a colored boy, was killed recently by being caught in a chain belt at the elevator at Cairo, Ill.

S. A. Ingersol, grain dealer of Sandoval, Ill., lost his elevator by fire July 18. Loss, \$2,500; no insurance.

Hugh Bell, a farmer near Chillicothe, Ohio, lost his barn by fire August 2, together with 3,000 bushels of grain.

The Rock Island Elevator at Herington, Kan., was burned July 13, with a quantity of grain, at a loss of \$3,500.

F. M. Snyder's elevator at Stanford, Ill., was burned August 7 with 400 bushels of oats. Loss \$4,000; insurance \$3,200.

G. A. Brainard, a contractor, fell from the roof of an elevator at Buda, Ill., recently and suffered severe injuries.

The flooring in Storms & Smith's elevator at Crossville, Ill., gave way recently under the weight of 5,000 bushels of wheat.

Mill 4 of the National Linseed Oil Company at Chicago was totally destroyed by fire July 21, causing a loss of nearly \$80,000.

A large quantity of hay and over 200 bushels of grain were destroyed in the burning of Henrickson Bros' barn at Kewanna, Ind.

The S. A. & D. Elevator at Portland, N. D., was destroyed by fire July 24. It had just been emptied. The origin of the fire is unknown.

The Northwestern Elevator at Atwater, Minn., was destroyed by fire July 10, together with 600 bushels of wheat. The cause of the fire is unknown.

Palmer's big grain platform at Huron, Cal., collapsed recently with a load of 2,000 sacks of grain. The loss was small, as the grain received no damage.

Peter Reinemann's elevator at Reedville, Wis., was burned recently at a loss of \$3,000; no insurance. William Thurow, a workman, lost his life in the fire.

A barn belonging to Case Cahill, near Collabar, N. Y., was struck by lightning and burned recently, together with 75 tons of brewers' grains, hay, oats, etc.

The Pacific Elevator at Redwood, Minn., was burned July 17, with 4,000 bushels of wheat, at a loss of \$8,000. Tramps are suspected of having set the fire.

Edward Ryan's grain storehouse at Calumet, Mich., and other property was burned recently at a loss of \$10,000; insurance on storehouse \$1,000, on grain \$1,000.

Lightning struck a large barn on Shaw's farm near Aurora, Ill., July 16, and the fire which ensued destroyed large quantities of hay and grain. Loss \$10,000.

A floor of J. I. Pritchett's warehouse at Danville, Va., gave way July 16, precipitating 100 bushels of corn and other goods to the ground, causing a loss of about \$400.

The Farmers' Grain and Stock Company's elevator at Prague, Neb., burned July 13, together with considerable grain. Insurance on elevator \$1,500; on grain \$1,000.

A. E. Kelley, a well-known commission merchant of Cleveland, Ohio, recently shot himself over his wife's grave. He had been despondent ever since his wife's death a year ago.

Hervey Guthrie, an 11-year-old boy, was playing in an elevator at Seymour, Ind., when a load of wheat was dumped on him. Before he could be rescued he was dead from suffocation.

A large barn belonging to Simeon Hodges, near Gardner, Kan., was set on fire by lightning August 10 and destroyed with its entire contents, including 1,200 bushels of English blue grass seed.

Thomas Wayne & Son's elevator at Oswego, Ill., containing 25,000 bushels of oats, was destroyed by fire July 16. The cause of the fire was not known,

but it is thought that it started from a small engine. Loss \$10,000; no insurance.

Brinkerhoff & Wright's elevator at Paris, Ill., was destroyed by fire August 10, together with three cars of grain. The loss was \$6,000 on elevator and grain, the elevator being insured for \$1,500.

The Mt. Pulaski Grain Company's elevator at Latham, Ill., was burned August 9, together with 20,000 bushels of corn. The cause of the fire is unknown. Loss \$20,000; partially insured.

Two elevators at Crookston, Minn., the Minnesota and Dakota and Corser & Co.'s, were recently destroyed by fire, together with 1,000 bushels of grain stored in the former. Tramps are supposed to have set the fire.

Hungerford's elevator at Loda, Ill., was destroyed by fire recently, together with 35,000 bushels of grain. The loss was partially covered by an insurance of \$10,000. Mr. Hungerford received severe injuries, barely escaping with his life.

Capt. R. B. Anderson, one of the most prominent traders on the Kansas City Board of Trade, disappeared last month and has not been found. He left letters stating his intention of committing suicide. He had had a long run of misfortune.

OBITUARY

Robert Steen of Kirkman, Iowa, a popular grain man, died July 16.

E. E. Lane, a grain merchant at Champaign, Ill., died suddenly on July 16. He was formerly engaged in the grain business at Gifford.

E. R. Fithian, a member of the commission firm of R. B. Hutchcraft & Co. of Paris, Ky., died August 7 from heart disease. He was 41 years of age.

Chas. T. Bartlett, who was for over 20 years a member of the New York Produce Exchange, died July 12 at the age of 72 years. He was born at Mount Vernon, Ohio, in 1823 and went to New York in 1873.

Charles Webber, of the firms of Webber & McGeorge and Webber & Ale, grain and produce buyers of Cass City, Mich., recently died while out driving with his wife. He was 33 years of age and a successful business man.

Lucian Ledford Barclay of Chicago died at San Diego, Cal., July 30. Mr. Barclay was a resident of Chicago since 1855, and from that time until 1870 was an active member of the Board of Trade. He was in failing health and went to California to recuperate this spring. He was a native of Lexington, Va., and was in his 64th year.

J. Wright Dean, of the grain commission firm of Boyd & Dean, Omaha, Neb., died in that city August 8 of stomach trouble. Mr. Dean was formerly well known in Kansas City, having been engaged in the grain business there with the Bryant Commission Company several years ago and afterward with F. C. Schroeder. Three years ago he went to Omaha and opened a commission house. His first venture proved unsuccessful, but he soon started in business again with ex-Governor Boyd of Nebraska as his partner. Mr. Dean was a college man and his companionable disposition made him many friends.

AFTER THE FARMER'S GRAIN.

A friend at Somonauk, De Kalb county, Ill., has sent us the following from the *Somonauk Reville* of August 9:

W. H. Carr, a commission merchant of Chicago, addressed a number of farmers in the Suydam school-house Monday night and presented a plan for a co-operative elevator. His plan is to have the farmers in this vicinity subscribe for 110 shares in a \$2,200 elevator at \$10 per share, the remaining \$1,100 to be furnished by Mr. Carr, who will see to the erection of the new elevator, which is patented by him. He will then handle all of the grain shipped to him for a commission of one-half of a cent. After his commission amounts to the sum he advanced for the building of the elevator he says he will turn his shares over to the farmers, who will then be sole owners. If the farmers intend to enter into a plan of this kind it would not be a bad policy to send a representative to Tonica or some other city where Mr. Carr says he has elevators of this kind in operation and ascertain of the farmers the benefit gained by them, get the dimensions of the elevators and learn if possible the royalty Mr. Carr expects for his patent on the elevator he contemplates building.

Another case of an elevator company unjustly suffering by buying grain from sellers who have not a clear title is reported from Aberdeen, S. D. A Mr. McMillan sued the Cargill Elevator Company for \$300, being the value of wheat on which he had a mortgage and which was sold to defendant. The jury gave the plaintiff a judgment for \$72.69.

THE EXCHANGES

Duluth Board of Trade memberships sold recently for \$125.

Tickets of membership to the New York Produce Exchange are held at \$600.

The Chicago Board of Trade on August 6 declared four elevators irregular, the Galena, Fulton, St. Paul and Pacific "B."

The treasurer of the Chamber of Commerce of Boston, Mass., has been found short in his accounts to the extent of \$6,000.

A Chicago Board of Trade membership ticket recently sold for \$800. The highest price ever paid for a membership was \$4,450, eleven or twelve years ago.

The Superior Board of Trade expects to greatly increase its business when the new warehouse law is in full force. Many elevator companies with offices in Duluth are opening offices in Superior.

The Buffalo Merchants' Exchange Building is being enlarged by the addition of an eighth story, which will cost \$15,000. The enlargement was made necessary by an increasing demand for offices.

Since early in July when Chicago Board of Trade directors refused to make several elevators regular many petitions, some from the heaviest dealers on the Board, have been sent in. But, notwithstanding, at the meeting, on August 6, the directors refused to reconsider their action.

Chicago Board of Trade members are being called upon by the city to pay brokers' licenses of \$25. Such a tax has not been collected for a good many years, and members say that at least ten years ago the courts decided Board of Trade commission men were not brokers within the meaning of the statute.

We are indebted to Secretary G. D. Rogers for the twelfth annual report of the trade and commerce of Minneapolis for the year ending Dec. 31, 1894, which he compiled for the Chamber of Commerce. It is an especially interesting number for the grain trade and contains several railroad maps of the Northwestern country.

We have received the 37th annual report of the trade and commerce of Milwaukee for the year ending Dec. 31, 1894, and for the fiscal year ending April 1, 1895, compiled by Wm. J. Langson, secretary of the Chamber of Commerce. It is a full and exhaustive report and contains statistical and other matter of interest.

The committee which has been investigating the question of the Philadelphia Commercial Exchange removing to the new Bourse Building has reported unanimously in favor of it. The report was adopted. On August 15 the members of the Exchange will have voted on the question, and little doubt is entertained that removal will be favored.

We have received Secretary Frank E. Wyman's annual report to the Duluth Board of Trade of the trade and commerce of Duluth for the years 1893 and 1894. Last year was the most eventful one in the history of the Board, marking the destruction of the old building and the construction of the new one, both of which are commemorated in fine illustrations. There is also statistical and other matter of interest in the report.

Members of the Cincinnati Chamber of Commerce are discussing the question of posting sales on the Chamber's sales book that were not made to another member and on 'Change. Trouble arose over H. L. Early of Early & Daniels selling a carload of oats to a patron outside the door at 1 cent above the price of the preceding day. As this would have a tendency to place other grain men at a disadvantage an appeal was made to Superintendent Murray and Mr. Early removed the quotation. The directors will take action in regard to a rule governing such cases.

At a recent meeting of the Corn and Flour Exchange of Baltimore, Md., President Charles England submitted names of committees to serve for three years, and they were unanimously elected, as follows: Wheat, John C. Legg, Edwin Hewes and P. W. Pitts; corn, John W. Snyder, C. Bosley Littig and Percy R. Hynson; oats, Frank Frick Jr. and C. S. Schermerhorn; rye, Jacob D. Michael and L. M. Jackson; barley, Sol. Straus; hay and straw, H. W. Anderson and James P. Clendenin for three years, W. G. Bishop and Daniel Rider for two years, and Philip Singleton for one year.

E. M. Thoman, the crop statistician of Chicago, has been missing for some time and his whereabouts is unknown. So Board of Trade people who value his monthly report were surprised to see it come out as usual. Mrs. Thoman herself got it out; it was on time and affected the market the day it showed itself, too.

VALUABLE BOOKS FOR GRAIN DEALERS.

The following standard works will be sent, postage paid, on receipt of prices given:

ROBINSON'S TELEGRAPH CIPHER.—The publishers have recently revised this excellent work, and we are now prepared to supply the trade. Cloth binding, \$1.50; leather.....\$2.00

WEIGH BOOKS.—Containing 125 perforated leaves with four weigh tickets and four stubs to each leaf, well printed upon good paper. The books are well bound. Copies will be mailed to any address for \$1.00

CLARK'S VEST-POCKET GRAIN TABLES.—A very useful and handy little book for grain buyers; to be used in reducing to bushels any quantity of grain or seeds up to 100,000 lbs. Size 2½ by 8½ in., 16 pages..... 50

POUNDS TO BUSHEL.—These tables which show the number of bushels in any quantity from 20,000 to 70,000 pounds were compiled for the Chicago Grain Inspection Department. They are well printed on good paper and conveniently arranged for quickly finding the number of bushels in a carload. Each book contains ten leaves and each leaf is indexed at margin and printed on one side only. Each book is neatly bound in cloth. They will save clerks much labor and prevent errors in reduction. Price for "OATS," \$1.00; "BARLEY," \$1.00; "CORN AND RYE," \$1.00. The set.....\$2.50

JENNINGS' TELEGRAPH CIPHER AND DIRECTORY TO NEW ENGLAND TRADE.—A new guide to carload buyers of grain throughout New England. A list of those engaged in the grain, feed and flour trade. Western grain shippers and millers wishing to do business in this territory will find this directory invaluable. The telegraph cipher has met with favor and is highly recommended by users. In fact the code part of the book is considered by many shippers superior to any other in use. It is modern and practical, a great money saver and will prevent mistakes. Nicely bound in leather.....\$3.00

ADAMS' CABLE CODEX.—This code is compiled especially for sending cablegrams and is used extensively in this country and abroad. The seventh edition, which is about to go to press, will contain 160 pages of cipher words, conveniently arranged. The code contains sentences covering and referring to buying and selling, condition of market, sterling money, United States money, business, financial matters, letters of credit, drafts, standing of firms and many sentences used by travelers. The cost of the code is a mere nothing compared with the saving which can be made on one message. Price, postpaid.....\$0.55

DAVIS' GRAIN TABLES.—These tables give the value of any number of bushels of produce weighing 60 pounds to the bushel from 25 cents to \$1.25 per bushel, and the value of any produce weighing 32, 48 and 56 pounds to the bushel at 15 cents to \$1.50. The book also contains Davis' Dockage Table, which gives the amount to dock any load of wheat up to 600 bushels at 1½ to 5 pounds' dockage. The book contains 219 pages of tables, printed on good paper, with large type, and well bound in cloth. The book is a new publication, and the arrangement of the tables is much more convenient than in some of the old publications. Price.....\$1.25

CLARK'S GRAIN TABLES.—This work is published in several different forms, for use in different lines of business. In these tables pounds are reduced to bushels, so that a buyer can quickly determine the correct number of bushels in a load without doing any figuring. Their use effects a saving every day of more than time enough to pay for them. The edition intended principally for reducing team scale weights to bushels contains nine tables, and is bound in paper. Price 50 cents. This will be found invaluable to country buyers. A new edition, intended for shippers and commission merchants, reduces any quantity up to 64,000 pounds to bushels. It contains 16 tables, and is neatly bound in cloth. Price.....\$1.50

ROPPE'S COMMERCIAL CALCULATOR.—A small manual in compact form which contains a new system of useful and convenient commercial tables. Also a "Practical Arithmetic for Practical Purposes" in which is embodied the shortest and simplest rules and methods known. It includes in its contents a table giving the value of cattle, hogs, flour, etc., for any amount ranging from 3 to 20,000 pounds, and in price from \$2.50 to \$6.75 per 100 pounds. It contains a table which shows the equivalent of English market quotations from 1 to 100 shillings in U. S. money. It also shows the freight on grain per bushel from 1 to 50 cents per 100 pounds. The grain tables show the number of bushels and odd pounds in any quantity of any kind of grain from 10 pounds to 100,000 pounds. The hay, straw and coal tables show the value in tons of any amount ranging from 10 to 3,000 pounds at prices from 25 cents to \$18 per ton. The interest tables are very complete and give the interest for any amount for any time and for any rate per cent. ranging from 6 per cent. to 10. The millers' and farmers' exchange table gives the number of pounds of flour to be received from wheat ranging from 5 to 3,000 pounds and from 25 to 40 pounds to the bushel. Tables of money weights and measures are also included, and also the

metric system. The book contains much other useful information. Price..... .50
For any of the above, address
MITCHELL BROS. Co., 184 and 186 Dearborn street,
Chicago, Ill.

TACOMA AS A GRAIN CENTER.

The rise of Tacoma, Wash., as a wheat shipping port began in November, 1881, when the first wheat-laden vessel to sail from that port cleared under charter of Balfour, Guthrie & Co., with 36,216 centals of wheat for Liverpool. Nearly a year after, in October, 1882, the second shipment took place, being 71,880 centals of Washington wheat to Queenstown. In 1883 only one shipment was made from that port and none in 1884, but in the fall of 1885 three vessels cleared. In the season of 1886-87 business had so increased that a grain warehouse was constructed, and a steady increase of shipments began. During the season of 1888-89 twenty-seven vessels carried away 1,774,139 centals of grain. That fleet was the largest that carried wheat from any port on the Pacific Coast. Machinery supplanted hand labor in the erection of Elevator "A" in the following season, and in 1893 eighty-three ships cleared with grain and flour.

Among the oldest grain men of the city is F. A. Sears of the firm of Sears & Co. He went to Tacoma from Buffalo, N. Y., in 1887, and was one of the earliest exporters from that port. Prominent in the trade are A. M. Ingersoll, president of the Tacoma Warehouse and Elevator Company, and A. K. Hiscock, vice-president, Alexander Reed, William H. Reed, Stephen P. Sears and others.

The present storage capacity of the city is 2,910,000 bushels, divided as follows: Elevator "A," 650,000 bushels; Tacoma Warehouse and Elevator Company, 1,250,000 bushels; Puget Sound Flouring Mills Warehouse, 1,010,000 bushels. This capacity will be increased 1,010,000 bushels by the completion of the Tacoma Land Company's new grain warehouse. This will be built at a cost of between \$75,000 and \$100,000. It will be 200 feet long, 130 feet wide and 52 feet to the highest point. On the side of the building next to the railroad tracks will be a platform 8 feet wide and on a level with the floor of a freight car. On the dock side will be a platform to facilitate the loading of wheat into vessels. The channel will be dredged to a depth of 25 feet at extreme low tide. The building will consist of a single floor and the entire construction will be of wood. It will be fitted up with the necessary facilities for handling wheat in sacks or bulk, as can be done most cheaply and satisfactorily.

The entire structure will be ready for use so that it may handle part of this year's wheat crop, and it will be leased by Balfour, Guthrie & Co., for a term of years.

IMPORTS AND EXPORTS OF FOREIGN BREADSTUFFS.

According to the last report of the Bureau of Statistics, the total value of breadstuffs imported during June was \$81,971, against \$192,243 for June preceding; and the total valuation of breadstuffs imported during the twelve months ending June 30 was \$2,859,449, against \$2,201,887 for the corresponding months ending June preceding.

Barley aggregating 5,146 bushels, valued at \$2,470, was imported in June, against 11,992 bushels, valued at \$5,639, imported in June preceding; and during the twelve months ending June 30 2,116,816 bushels, valued at \$867,743, were imported, against 791,061 bushels, valued at \$358,744, imported during the corresponding months ending June preceding.

Oats amounting to 518 bushels, valued at \$209, were imported during June, against 2,243 bushels, valued at \$879, imported during June preceding; and during the twelve months ending June 30 308,308 bushels, valued at \$80,901, were imported, against 8,345 bushels, valued at \$3,928, imported during the corresponding months ending June preceding.

Wheat aggregating 34,543 bushels, valued at \$20,729, was imported during June, against 213,219 bushels, valued at \$125,917, imported during June preceding; and during the twelve months ending June 30 1,429,993 bushels, valued at \$868,965, were imported, against 1,181,060 bushels, valued at \$769,177, imported during the corresponding months ending June preceding.

Imported barley aggregating 10,272 bushels, valued at \$5,507, was exported during the twelve months ending June 30, against 30,412 bushels, valued at \$15,224, exported during the corresponding months ending June preceding. Imported wheat aggregating 548,792 bushels, valued at \$344,530, was exported during the twelve months ending June 30, against 216,420 bushels, valued at \$131,492, exported during the corresponding months ending June preceding.

FOR KNIGHTS TEMPLAR.

Low rate excursion on Boston via Nickel Plate Road. Tickets on sale August 19 to 25 inclusive. Lowest rates; through trains; palace sleeping cars; unexcelled service, including dining cars and colored porters in charge of day coaches. For particulars address J. Y. CALAHAN, General Agent, 111 Adams street, Chicago, Ill. No. 81.

MILWAUKEE'S PIONEER GRAIN DEALER RETIRES.

Angus Smith, the pioneer elevator owner and grain dealer of Milwaukee, retired from business August 2. He has leased his four elevators for five years to the Wisconsin Grain and Elevator Company, a new concern with a capital stock of \$200,000. C. C. Rogers is president of the company, John S. George is vice-president and secretary and Calvin E. Lewis is treasurer. A number of other well known Milwaukee business men as well as some Chicagoans are interested in the company.

Mr. Smith built the elevators leased to-day during the years from 1875 to 1880, at a total cost for the three elevators and shed of \$400,000, and has personally operated them ever since. The capacity, storage-receiving and shipping of the elevators is as follows: A, 850,000 bushels; B, 900,000; C, 200,000; D, 200,000, making a total storage capacity of 2,150,000 bushels of grain, or over two-thirds of the entire elevator capacity in the city.

Angus Smith came to Milwaukee in 1858 and with Jesse Hoyt of New York built the first railroad warehouse and elevator erected in Milwaukee and started a commercial business under the firm name of Angus Smith & Company. The first warehouse was located at a point where the foot of Fowler street is now, then the terminus of the Milwaukee & Prairie du Chien Railroad, and was the first warehouse to receive and unload grain in bulk from cars for storage and transshipment. It had a storage capacity of 500,000 bushels, which at that time was considered ample room for any receipts of bulk wheat ever likely to come to Milwaukee over that road. This elevator is now known as the St. Paul elevator C, and is the smallest of six built since that time.

Through this elevator and in the adjacent sheds, Mr. Smith conducted the business of receiving, storing and shipping all the freight of the Milwaukee & Prairie du Chien road, adding to his storage facilities as the business increased. In 1864, he built the large elevator now known as St. Paul elevator B, which has a capacity of 850,000 bushels. Mr. Smith remained in full control of the grain storage of his corporation until 1874, when he entered into an engagement to build and run such elevators as the increased business of the Chicago & Northwestern might require. He built the first elevator under this agreement in 1875, which is known as Smith elevator A, with a capacity of 900,000 bushels, and is one of the elevators which were leased to the new company. In 1880 he added elevator B, 800,000 bushels, also leased to the new concern. Later he rebuilt and entirely remodeled the Kellogg & Strong elevator, now known as Smith elevator C, also leased to the new company. The annex or shed was also built about this time.

For some years past the firm of Angus Smith & Company, more recently the A. Smith Elevator Company, has done the entire grain storage business of the Chicago & Northwestern Company in Milwaukee. The aggregate amount of grain which passed through the Smith elevators here during the year 1880 was over 4,000,000 bushels. Angus Smith enjoys the distinction of having inaugurated the handling of bulk grain from cars to shipboard, and, incidentally, the present system of inspection, which became an immediate necessity as soon as the shipment in bags was superseded by the more modern system of shipping in bulk.

For many years Mr. Smith also did an extensive commission business in grain, both as receiver and shipper, and his purchases alone did much in earlier years to establish the permanency and reliability of the Milwaukee grain market. Through the efforts of Mr. Smith also the Winona & St. Peter Railroad was built, and it was run under his management as a direct tributary to Milwaukee till its purchase by the Northwestern.

Mr. Smith, who is now 73 years old, will travel for his health.

The first car of new corn was marketed at Guthrie, Okla. Ter., July 26. It was a sample of what is said to be the greatest crop of corn ever grown in the Territory, and it sold at 30 cents per bushel.

A consular report of the potato exportation from the port of Dundee, Scotland, to the United States shows a large decrease. In 1893-94 31,745 tons, valued at \$554,268, were exported, and 1894-95 14,657 tons, valued at \$101,244.

A shipper of corn who, knowing that the one to whom he consigned it could not pay for it, and knowing also that he himself was expected to pay for the use of the car while the corn was in it, allowed it to remain on the tracks until he sold it to another party is liable for the use of the car.

A purchaser who has paid the freight and receipted for a car of goods is not bound to accept and pay for them if they were unmerchantable when shipped, or became so before arrival, because of the negligent manner in which they were packed by the seller, where there was no opportunity to make such an examination of the goods as would disclose their condition until the car was delivered and was being unloaded.

Latest Decisions.

Immediate Notice Is Reasonable Notice.

A provision in an insurance policy that "in case of loss, the assured shall give immediate notice thereof, and shall render to the company a particular account of said loss, under oath, stating the time, origin, and circumstances of the fire," the Supreme Court of Oregon holds, *Carey vs. Farmers' Etc. Co.*, Ore., April, '95, 40 P. 91, must be construed to mean that the proof of loss shall be made within a reasonable time in view of all the attending circumstances.

Carrier Cannot Escape Liability.

When a common carrier receives goods in order to transport them from one point to another and fails to deliver them at the point of their destination it is liable for the reasonable value of the goods at that point, it not being shown that the failure to deliver was occasioned by inevitable accident or by the act of the public enemy, and the carrier cannot escape its liability by showing that the means of transportation employed by it were furnished to it by others. So held by the St. Louis Court of Appeals in the case of *Austin vs. The St. Louis & St. Paul Packet Company*, decided on the 12th inst.

Breach of Contract, Repudiation.

A contract for the sale of a grain separator specified the price of the machine and provided that the freight thereon to the point of delivery should not exceed a designated amount. Upon the arrival of the machine the vender presented a bill for an amount of freight greater than that specified in the contract. The Supreme Court of Georgia held, in the case of *Johnson vs. Latimer et al.*, decided on the 15th ult., that the vendee was not compelled to accept the property and claim a deduction on account of the excessive freight charges, but that he could refuse to receive the machine and repudiate the contract.

Can Attach Property in Cars in Transit.

The Missouri Supreme Court, in affirming the decision of a lower court, has rendered a decision important to railroads. The decision in effect is that cars in transit between states can be attached. Two years ago the Southern Grain Company had a claim against Hatch & Cramm, and brought suit in the Circuit Court, and attached a carload of lard owned by Hatch & Cramm which was made up in a freight train on the tracks of the Missouri, Kansas & Texas. The railway company claimed that the car was in transit, and could not be attached because a railroad was a common carrier, and that after a train was made up to set out a particular car would delay traffic and be a violation of the interstate law. The lower court decided the car might be attached, and the Supreme Court has affirmed that decision.

Refusing to Deliver Grain Bought.

A sold to B a quantity of corn, and B, claiming that A failed to deliver all the grain, sued to recover an advance he had made on it, and damages for the breach of the contract. A denied that he had broken his contract and counter-claimed for the balance due him, and for the damages he suffered from B's refusal to take the balance of the grain. On the trial the only witnesses were A and B themselves, so that there was no preponderance of evidence on the part of B, the plaintiff. On appeal the Supreme Court of Iowa in the case of *Murphy vs. Adams* held that "Unless the plaintiff has proven his case by a preponderance of evidence, the appellate court cannot give him a new trial. And a vendee cannot break a contract and recover from the vender what he has paid on it unless he proves by sufficient evidence that the vender is in fault."

Cannot Sell Membership to Satisfy Debt.

The certificate of membership of the Chicago Board of Trade was directed to be sold for the benefit of the holder's creditors, and he carried the judgment (*Barclay vs. Smith*) to the Supreme Court of Illinois, where it was reversed. Judge Craig, in the opinion, said: "The certificate only entitles the holder to attend the meetings of the Board and deal in the various products of the country; but he is not entitled under it to any dividends or pecuniary profits; though a valuable privilege, it is not property, and is not subject to sale for the member's debts. It is a right which may be regarded as valuable, and which has a market value, but it is a right which cannot be divided or destroyed, except by the Board itself, or the failure of a member to conform to its rules and regulations, and it is not transferable, except the assignee is approved by the votes of at least ten directors. This membership is like the membership of a church, with its privileges, and the membership in Masonic and other social organizations, and licenses to carry on certain callings or business. It has never yet been

claimed that these privileges, however valuable, can be made the subject of a sale to satisfy a debt."

Agent Buying Wheat on Credit.

In the case of *Kamarowski vs. Krumdick* the Supreme Court of Wisconsin held that an agent to buy wheat or other grain must, in order to bind his principal, who furnishes in advance the funds to make the purchases, buy for cash, unless he has express power to buy upon credit. And in the absence of express authority, or proof of the custom of the trade, to buy on credit, such agent cannot bind his principal by a purchase upon credit of a person who is ignorant of his real authority as between himself and his principal.

Liable for Wrong Delivery of Grain.

J sold to W a carload of corn for cash, and a partial payment was made on it. The grain was sent over a railroad in the name of J for his own account, but the company delivered the grain to W without authority, and the balance due was not paid to it for J's account. An action was brought for the conversion of the corn (*Jellett vs. St. Paul, Madison & Milwaukee Railroad Company*), and the company claimed the allowance of the amount paid by W on the purchase price. The trial court instructed the jury to find a verdict for the full value of the grain, and the company appealed to the Supreme Court of Minnesota, who affirmed the judgment. Judge Vanderburgh, in the opinion, said: "The company was responsible to the plaintiff alone, and had no right to make a voluntary appropriation of the property to another, and must be held accountable for the full value of it. The company will have a right of action over against W, and as to him, it can only be determined in an action between him and the plaintiff what, if any, claim or equities he may have remaining to be adjusted between them. In this way no one will be permitted to profit by his own wrong."



Issued on July 2, 1895.

GOVERNOR FOR GAS ENGINES.—James A. Charter, Beloit, Wis., assignor of one-half to John Charter, Sterling, Ill. No. 542,043. Serial No. 529,391. Filed Nov. 20, 1894.

GAS OR OTHER LIKE MOTOR.—James E. Weyman, Arthur J. Drake and James A. Drake, Guilford, England. No. 542,124. Serial No. 491,131. Filed Nov. 16, 1893. Patented in England March 10, 1892. No. 4,735; in Germany June 25, 1892, No. 66,958; in Belgium July 8, 1892, No. 100,492; in France July 8, 1892, No. 222,871, and in Austria-Hungary July 15, 1892, No. 36,665.

Issued on July 9, 1895.

BALING PRESS.—John M. Sanders, Dalton, Ga. No. 542,314. Serial No. 518,422. Filed July 24, 1894.

FOUL SEED EXTRACTOR AND RECLEANER.—Edgar L. Fixler and Anson H. Williams, Delta, Ohio. No. 542,337. Serial No. 542,337. Filed Nov. 16, 1894.

GRAIN ELEVATOR.—Wm. W. Lockwood, Winfield, Kan., assignor to the Lockwood Scale and Elevator Manufacturing Company, same place. No. 542,418. Serial No. 530,038. Filed Nov. 26, 1894.

Issued on July 16, 1895.

PINCH BAR.—John H. Fellenbaum, Bellefonte, Pa. No. 542,634. Serial No. 515,405. Filed June 22, 1894.

GAS ENGINE.—Otto P. Amend, New York, N. Y. No. 542,971. Serial No. 506,397. Filed April 5, 1894.

Issued on July 23, 1895.

HORSE POWER.—Josiah S. Tuttle, Burns, Kan. No. 543,066. Serial No. 525,131. Filed Oct. 6, 1894.

GAS ENGINE IGNITING APPARATUS.—Geo. W. Waltenbaugh, San Francisco, Cal. No. 543,116. Serial No. 532,090. Filed Dec. 17, 1894.

BALING PRESS.—John M. Washburn, Attica, Ind. No. 543,278. Serial No. 537,297. Filed Feb. 4, 1895.

CHOICE OF ROUTES.

To Knights Templar Conclave, Boston, via Nickel Plate Road, embracing Niagara Falls, Thousand Islands, Rapids of the St. Lawrence, Saratoga, Palisades of the Hudson, Hoosac Tunnel and ride through the Berkshire Hills by daylight. Tickets on sale August 19 to 25 inclusive; lowest rates; quick time and service unexcelled, including palace, sleeping and dining cars. Address J. Y. CALAHAN, General Agent, 111 Adams street, Chicago, for further information.

No. 83.

THE MARKETS.

We will be pleased to publish under this head short reviews of the conditions ruling in the different markets. Copy must reach us by the morning of the 14th of each month.

GRAIN REPORT OF COLLINS & CO., Cincinnati Aug. 10.—The situation governing the markets shows no material change from our last report. Rain is more urgently needed in some localities, but the general condition of the growing crop of corn maintains a good promise. More anxiety to market corn is evidenced, but the quotations ruling do not meet with favor, and are reluctantly accepted. On the other hand the inquiry is slow, and of a hand-to-mouth character, with round lots selling at prices considerably under current quotations, and the market closes weak, with tendency lower. WHEAT.—The receipts are small, and very few of the arrivals are grading better than No. 3 Red. A fairly active demand prevails for the limited offerings, with values slightly easier in sympathy with the declines in the outside markets. No. 2 Red at 69½@70 cents, No. 3 Red at 67@68 cents, ungraded by sample at 60@67 cents, as to quality. CORN.—Heavy with receipts increasing, and lower prices will have to be accepted to induce trading. No. 2 White at 42½@43 cents, No. 3 at 41@41½ cents, No. 2 Mixed and Yellow at 42@43 cents, No. 3 Mixed at 41 cents. EAR CORN.—The inquiry is small, oats largely taking the place of ear corn for feeding purposes, for at prevailing prices oats are considered preferable. Choice Yellow at 42@43 cents, Mixed and White at 40@41 cents. OATS.—Arrivals have been fairly liberal during the week, but they met an active demand on the part of the trade, as the prevailing prices offer greater inducements to carry larger supplies. No. 2 new White scarce at 24@25 cents, No. 3 new White at 21@22 cents, No. 2 new mixed at 22@22½ cents, No. 3 new at 20½@21 cents, ungraded at 19@20 cents, old oats at 1 cent to 1½ cents over the prices of new, with the inquiry mostly for new. RYE.—Arrivals are somewhat larger with the demand slow. No. 2 at 45@46 cents. HAY.—Receipts for the week 1,291 tons, shipments 1,1 tons; for the corresponding week last year the receipts were 2,249 tons, shipments 413 tons. Arrivals of the new crop are coming in better condition and the top qualities of both old and new are in fair request. Other grades are slow with the demand light. Choice old at \$14.50, No. 1 \$14.00, Choice new at \$13.00@13.50, No. 1 new at \$12.00@12.50, No. 2 at \$10.50@11.00. STRAW.—Wheat at \$4.00@4.50, rye at \$5.00@5.50 per ton including sacks. Middlings scarce and are inquired for. Values depend on quality. If you have any, send us mail samples and we will promptly inform you what can be done with them.

LOCATIONS FOR FACTORIES.

The name of the Chicago, Milwaukee & St. Paul Railway has long been identified with practical measures for the general upbuilding of its territory and the promotion of its commerce, hence manufacturers have an assurance that they will find themselves at home on the company's lines.

The Chicago, Milwaukee & St. Paul Railway Company owns and operates 6,150 miles (9,900 kilometers) of railway, exclusive of second track, connecting track or sidings. The eight states traversed by the lines of the company, Illinois, Wisconsin, Northern Michigan, Iowa, Missouri, Minnesota, South Dakota and North Dakota, possess, in addition to the advantages of raw material and proximity to markets, that which is the prime factor in the industrial success of a territory—a people who form one live and thriving community of business men, in whose midst it is safe and profitable to settle. Many towns on the line are prepared to treat very favorably with manufacturers who would locate in their vicinity.

Mines of coal, iron, copper, lead and zinc, forests of soft and hard wood, quarries, clays of all kinds, tan-bark, flax and other raw materials exist in its territory in addition to the vast agricultural resources.

A number of new factories have been induced to locate—largely through the instrumentality of this company—at towns on its lines. The central position of the states traversed by the Chicago, Milwaukee & St. Paul Railway makes it possible to command all the markets of the United States. The trend of manufacturing is westward. Nothing should be permitted to delay enterprising manufacturers from investigating. Confidential inquiries are treated as such. The information furnished a particular industry is reliable. Address

LUIS JACKSON,
Industrial Commissioner, C., M. & St. P. R'y,
425 Old Colony Building, Chicago, Ill.

Small boys have recently been stealing heavily from the cars of grain standing on the sidings in Hannibal & St. Joseph Railroad yards at St. Joseph, Mo. Their plan is to bore a hole in the bottom of the car with an auger and let the grain run out into a sack held open beneath. When the sack is filled a plug is driven into the hole and the stolen grain carried off and disposed of for cash. The thieves have not yet been caught.

Comptroller Wood has introduced a bill at Ottawa to amend the Canadian grain inspection act. It provides for a reduction of fees at points where the amount received in fees by inspectors is excessive. It also proposes to provide greater facilities for entering the elevators and examining the books kept there for the purpose of showing the quantities of grain exported, and all other particulars that may be necessary. This amendment is to render clear any doubt that might exist as to whether the government had a right to examine the books belonging to the elevators.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

WILL EXCHANGE LAND FOR ELEVATOR.

Clear North Dakota land will be exchanged for a well located grain elevator. Address
H. H. RICE, 324 Rialto Building, Chicago, Ill.

GRAIN TESTERS FOR SALE.

Improved brass grain and seed testers, warranted to be true to the United States standard Winchester bushel; one pint, \$5.50; one quart, \$6.50; two quarts, \$7. Address

A. S. GARMAN & SONS, Akron, Ohio.

MAN WITH CAPITAL WANTED.

Wanted, a party with capital to assist in the development of the Filstead Combination Elevator Head, to whom a one-half interest will be given at a reasonable price. Address

M. G., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

RUDY'S PILE SUPPOSITORY

Is guaranteed to cure Piles and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and free sample to MARTIN RUDY, Registered Pharmacist, Lancaster, Pa. No POSTALS ANSWERED. For sale by all first-class druggists everywhere. Peter Van Schaack & Sons, Robert Stevenson & Co., Morrison, Plummer & Co., and Lord, Owen & Co., wholesale agents, Chicago, Ill.

DAVIS' GRAIN TABLES.

The value of wheat or any grain at 60 pounds to the bushel, for any amount less than 100 bushels is shown without addition or multiplication, and for any amount over 100 and under 1,000 bushels, with but a single addition; at any price from 25 cents to \$1.25 per bushel. The value of bushels and pounds of other grain also is shown at 56, 48 and 32 pounds to the bushel at any price from 15 cents to \$1.50 per bushel. Price, postpaid, \$1.25. Address
E. D. DAVIS, 610 Nicollet Ave., Minneapolis, Minn.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

ENGINE CHEAP.

One second-hand 300-horse power engine for sale cheap. Address

SIMPSON & ROBINSON COMPANY, 71-72 Commerce Building, Chicago, Ill.

GRAIN AND COAL BUSINESS.

Grain and coal business in Central Ohio for sale. Good grain point. Address

M. T., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

ELEVATOR, LUMBER AND COAL YARD.

Elevator, lumber and coal yard, also my home, for sale cheap. Gasoline engine power. Elevator capacity 25,000 bushels. Good lumber and coal business. In good territory 70 miles south of Chicago on the Wabash Railroad. A money maker for right party. Will sell elevator and home separate if wanted. Address

Lock Box 9, Emington, Ill.

TUBULAR BOILER AND SLIDE VALVE ENGINE.

For Sale—One 40-horse power tubular boiler, complete; also one 40-horse power slide valve engine in good running order. Address

KELLY BROS., Edgerton, Kan.

BRICK ELEVATOR FOR SALE.

For Sale—Brick elevator of 100,000 bushels at a bargain. Well located for local trade and shipping. Equipped with latest and best cleaning and clipping machinery, corn mill, etc. Also brick hay warehouse of 100 cars' capacity. Clear title; immediate possession. For full particulars address

FITCHBURG ELEVATOR COMPANY, Thirty-ninth street and Stewart avenue, Chicago, Ill.

WILL BE SOLD TO CLOSE ESTATE.

The elevator at Henry, Ill., formerly owned and operated by G. C. Griswold & Co., is for sale, to close the estate of G. C. Griswold, deceased. The elevator has a capacity of 150,000 bushels; the cribs can dump 30,000 bushels of ear corn. Elevator and cribs in first-class condition. Also three steam canal boats and five canal barges. Address

A. K. KNAPP, Minooka, Ill.

KANSAS ELEVATOR AT A BARGAIN.

The largest and most complete elevator in Northern Kansas for sale. Located at Clifton, Clay and Washington counties, on the C., R. I. & P. and the U. P. Railways, in the best corn and oats district of the state—the Republican Valley. Elevator nearly new, built in 1888; capacity 75,000 bushels. With 35-horse power engine, corn sheller, cleaners, conveyors, elevators, hopper scales; double driveway with a receiving and loading capacity of 20 to 25 cars each per day. In a first-class town, good schools and churches. Price reasonable. A bargain. Address

CAYWOOD & Co., Clifton, Kan.

FOR SALE.

THREE GRAIN ELEVATORS

In Western Iowa on C. & N. W. R. R.

MARTIN D. STEVERS & CO.

COMMISSION MERCHANTS,

218 La Salle St., - CHICAGO.

SEND ORDERS FOR

HARD
SOFT
BLOCK
BLACK-
SMITH

COAL
COKE

Best Grades
Best Prices.
Best Deliveries

TO MILES & COMPANY,

MINE AGENTS AND SHIPPERS,

PEORIA, ILL.

LA FLORIDA.

Is the best 5-cent cigar on Earth. If your dealer does not keep it, send us five dollars, and we will deliver you 100.

THE FLORIDA CIGAR CO., Tampa, Fla.

TO POULTRY RAISERS.

The Complete Poultry Manual is a neat little work which is well worth reading by those interested in poultry, or by boys or girls who want to turn an honest penny. The price is only 25 cents. Sent postpaid on receipt of price. Address

MITCHELL BROS. CO.,

184 Dearborn Street, Chicago, Ill.

THE ALBERT DICKINSON CO.

DEALERS IN COTTON

GRAIN BAGS

IN CAR LOTS OR BY THE BALE.

PLEASE CORRESPOND BEFORE BUYING.

Offices, Cor. Clark and Sixteenth Sts., Chicago.

ROOFING AND SIDING.

For Corrugated Iron and Best Steel Roofing

For Elevators and other buildings, write to

SYKES STEEL ROOFING CO.,

611 South Morgan Street, CHICAGO.

Standing Seam Steel, Corrugated Iron, Metal Shingles, Felt Roofing.

ELEVATOR AND MILL IRON SIDING A SPECIALTY.

Kansas City Metal Roofing and Corrugating Co.,

416 Delaware St., KANSAS CITY, MO.

JAMES A. MILLER & BRO.,

129 and 131 South Clinton Street, CHICAGO,

Corrugated Iron Roofing and Siding

Material Only or put on Complete.

Special pains are taken to get out these materials so they can be cheaply put on and make a good job.

Rhodes, Dickelman & Co.,

FOREST, OHIO,

Make a full line of Steel Roofing, Siding and Corrugated Iron of superior grade. Special prices made to elevator men. All such should write for prices before buying.

STEEL ROOFING AND SIDING.

Established 1872.

SCOTT & CO.,

75 East Front Street, CINCINNATI, OHIO.

FOR MILLS AND ELEVATORS.—We pay the freight.

Gedge Bros. Iron Roofing Co.,

Successors to Porter Iron Roofing Company,

Manufacturers of Iron and Steel Roofing and Corrugated Iron.

Elevator Siding and Roofing a Specialty.

Box 690, ANDERSON, IND.

Porter Iron Roofing and Corrugating Co.,

Race and Front Streets, Cincinnati, Ohio,

Manufacturers of all kinds of

Iron and Steel Roofing and Siding, Galvan-

ized Steel Roofing,

Eaves Troughs,

Co ductor Pipe,

etc., etc.



The pioneers of the metal roofing business in the U. S. When writing for our prices and illustrated catalogue mention this paper.



DURABLE—EASILY APPLIED.

This roofing is manufactured from natural Trinidad asphalt materials, and will not dry up and become brittle under exposure to the weather as coal tar roofings do. Send for free sample of roof 12 years old, with circular and price list, to

WARREN CHEMICAL & MFG. CO.,
56 Fulton St., New York, U. S. A.

COMMISSION CARDS.

[We will not knowingly publish the advertisement of a bucket-shop keeper or irresponsible dealer.]

CHICAGO BOARD OF TRADE.

As many complaints are coming to the Chicago Board of Trade showing that persons intending to deal in grain and provisions through members of the Board, and subject to its rules and regulations, are misled into dealing with persons or firms who have no connection with this Board, the public is cautioned against dealing with such persons or firms, and is notified that GEORGE F. STONE, Secretary, will answer any inquiries as to whether any particular person or firm is a member of such Board.

GEORGE F. STONE, Secretary.

S. W. FLOWER & CO.,

GRAIN AND SEEDS,

—TOLEDO, OHIO.

Specialties—Clover, Timothy and Alsike. Correspondence Solicited.

COLLINS & Co.,

STRICTLY COMMISSION

Grain, Hay and Mill Feed.

CINCINNATI, OHIO.

Established 1879.

LEDERER BROS.,

Grain, Clover and Timothy Seeds and Flour,

Commission Merchants,

214 and 216 Patterson St., - - Baltimore, Md.

We give careful attention to every shipment. Are always prepared to make cash advances in consignments. We make a specialty of handling spot goods, which we either sell after arrival or hold, if requested. We solicit your trade, as we do a strictly commission business.

References: Merchants' National Bank, Baltimore, Md., and the Commercial Agencies.

Robert McKnight & Sons,

COMMISSION MERCHANTS

AND DEALERS IN

GRAIN, FEED AND HAY,

2106 and 2108 Market Street, - PHILADELPHIA.

REFERENCES: { Merchants' and Third National Banks, PHILADELPHIA.

T. D. RANDALL. ESTABLISHED 1852. GEO. S. BAIDOE.

T. D. Randall & Co.,

GENERAL COMMISSION MERCHANTS.

GRAIN, HAY AND FLOUR.

Special attention given to supplying millers with good milling wheat.

219 South Water Street, - - - CHICAGO.

Killpatrick, Lucas & Co.

GRAIN AND HAY.

REFERENCES: Girard National Bank, Phila. Advances on Bill of Lading. Market reports furnished free. Correspondence solicited.

Philadelphia, Pa.

W. F. JOHNSON. F. J. SCHUYLER.

W. F. JOHNSON & CO.,

Grain, Seed and Provision

COMMISSION MERCHANTS

Room 59 Board of Trade, CHICAGO.

Rooms 406-408 Corn Exchange, MINNEAPOLIS.

Room 317 Chamber of Commerce, ST. LOUIS.

Room 23 Chamber of Commerce, MILWAUKEE.

Address all Correspondence to and make all Drafts on Chicago.

COMMISSION CARDS.

J. J. BLACKMAN.

G. W. GARDINER.

J. J. Blackman & Co.,

COMMISSION MERCHANTS,

WHEAT, CORN, OATS, BRAN, MIDDINGS, SCREENINGS, HAY,

SEEDS, BEANS, PEAS AND CORN GOODS.

93 Broad Street, Rooms 604 and 605, - NEW YORK.

Mohr-Holstein Commission Co.,

**GRAIN AND PRODUCE
COMMISSION MERCHANTS,**

BARLEY, WHEAT AND SEEDS

SPECIALTIES.

Room 29, Chamber of Commerce.

Milwaukee, Wis

Branch Houses: Chicago and Minneapolis.

LEMAN BARTLETT.

O. Z. BARTLETT.

L. Bartlett & Son,

**GRAIN AND PRODUCE
COMMISSION MERCHANTS.**

BARLEY A SPECIALTY.

Room 23 Chamber of Commerce Bldg.

Milwaukee, Wis.

Careful attention given to orders from Brewers, Maltsters and Millers.

D. G. Stewart,

GRAIN AND COMMISSION.

Proprietor IRON CITY GRAIN ELEVATORS.

Capacity, 300,000 Bushels.

LIBERAL ADVANCES ON ALL CONSIGNMENTS.

CORRESPONDENCE SOLICITED.

OFFICE, 1019 Liberty Street, - PITTSBURGH, PA.

ESTABLISHED 1871.

J. N. WOOLISCROFT & CO.,

Receivers and Shippers of

GRAIN and HAY,

ROOMS 10 and 11 GAZETTE BLDG., Cincinnati, Ohio.

H. B. SHANKS. Established 1873. S. H. PHILLIPS.

Shanks, Phillips & Co.,

COMMISSION MERCHANTS,

HAY, CORN, OATS, BRAN, CHOPS, FLOUR AND CORN MEAL.

306 Front St., Memphis, Tenn.

Refer to Union and Planters' Bank. Cash advances on B. of L.



F. H. PEAVEY & CO.,

Minneapolis,

GRAIN RECEIVERS.

Consignments Solicited.

MILLING WHEAT A SPECIALTY.

SHIP YOUR GRAIN

—TO—

P. B. & C. C. MILES,

COMMISSION MERCHANTS,

PEORIA, ILL.

Established 1875.

LIBERAL ADVANCES
QUICK RETURNS.

REFERENCES:—Commercial Nat. Bank, Peoria Savings, Loan & Trust Co., Peoria.

COMMISSION CARDS.

ACCOUNTS OF GRAIN DEALERS
OR ORDERS FOR

Speculative Investments

On the CHICAGO BOARD OF TRADE SOLICITED.
Call at our office or write for private Cipher Code or Shippers Grain Record.

McLAIN BROS. & CO.,

RIALTO BUILDING, CHICAGO.

E. L. ROGERS & CO.,

ESTABLISHED
1863.

**COMMISSION
MERCHANTS,**

GRAIN, Flour, Seed, Hay and Straw.

135 S. Second St., (Chamber of Commerce) PHILADELPHIA, PA.

Liberal advances made on consignments. Market reports furnished gratuitously on application. Correspondence solicited.

References: { Corn Exchange National Bank,
Manufacturers National Bank,
Merchants National Bank.

E. P. MUELLER,

Shipper of Wet Feed,

From Chicago, Milwaukee and La Crosse.

Particular attention paid to the shipments
of mixed car lots.

860 Calumet Bldg., 189 La Salle St., CHICAGO.

Will pay the highest prices for **Wet and Dried Brewers' Grains, Dried Distillers' Slops, Starch Feed, Damaged Wheat, Hominy Feed and Barley Sprouts** under yearly contracts
Write for estimates F. O. B. cars your city.

E. R. Ulrich & Son,

SHIPPERS OF

WESTERN GRAIN,

ESPECIALLY

High Grade White and Yellow Corn.

Elevators through Central Illinois on Wabash Ry., Chicago & Alton Ry., C., P. & St. L. Ry., and St. L., C. & St. P. Ry.

Main Office, 6th Floor, Illinois National Bank Building,
SPRINGFIELD, ILLINOIS.

Write for Prices Delivered.

Consign your Grain and Seeds to

HILL BROS. & CO.

14 and 16 Pacific Avenue, CHICAGO.

STRICTLY COMMISSION.

Personal Attention.

Correspondence Invited.

Established 1873.

**ORDERS FOR FUTURE DELIVERY EXECUTED
ON MARGINS.**

GEO. N. REINHARDT & CO.,

Melrose Station, New York City.



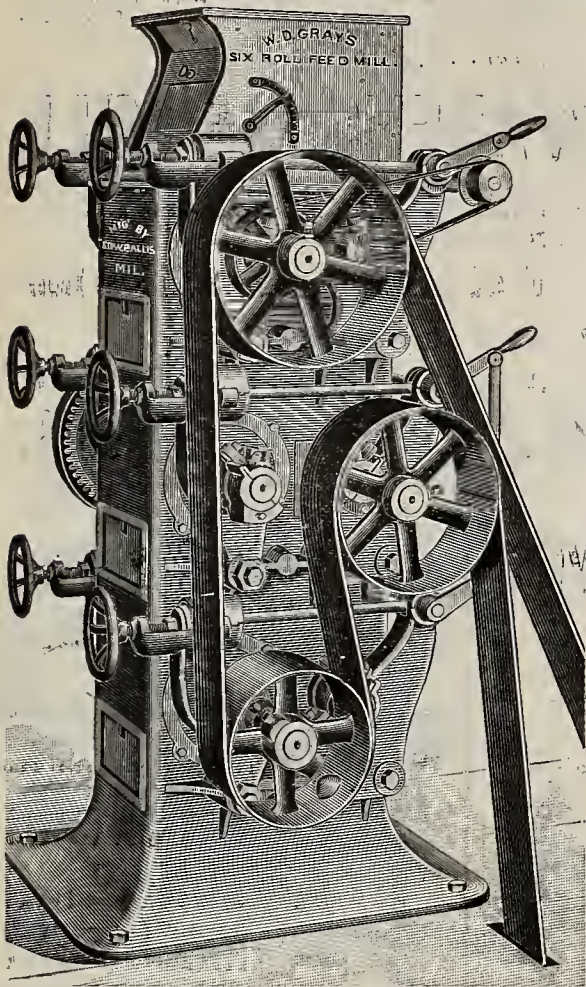
We sell on Commission and buy direct,

HAY, GRAIN AND FEED.

Storage capacity, 8,000 bales, 30,000 bushels.
Let us know what you have to offer.

HUNDREDS OF MILLERS

USE A FEED MILL LIKE THIS,
AND THIS IS WHAT THEY THINK OF IT:



MANUFACTURED BY

THE EDWARD P. ALLIS CO., - Milwaukee, Wis.

"We got fooled once in buying a cheap, light Feed Mill, but since we got the Allis Feed Roll we are happy once more."

"Your Feed Mill grinds sixty-five bushels of fine meal per hour with fifteen-horse power."

"The farmers now say, 'Grind it a little coarser this time.' With my old feed mill I could never grind fine enough to suit them."

"We ground a car of 650 bushels, sacked it, and put it back in car, all in five hours."

"Our new Allis Feed Mill is paying for itself at the rate of \$1 per hour."

"I astonish the farmers with my Allis Feed Mill, for as soon as their corn is unloaded it is ground and ready to load back in their wagon."

"We advise any man wanting a Feed Mill to buy the Allis make."

"I have run several different makes of Feed Mills, but none grinds so fast and so fine, and gives so little trouble as the Allis."

York Foundry & Engine Co.

YORK, NEB.

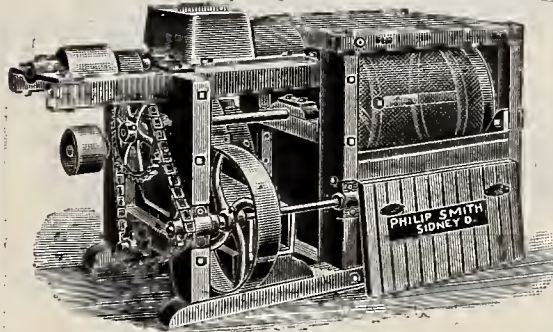
GRAIN ELEVATOR MACHINERY,

Gas Engines and Power Connections.

SEND FOR CATALOGUE.

The Miami Valley Corn Sheller.

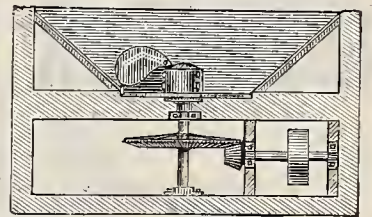
The latest improved revolving screen mill Sheller, for mills, warehouses and portable purposes.



DUSTLESS.

WASTES NO GRAIN.

REDUCES FIRE RISK.



WE FURNISH PLANS AND OUTFITS FOR GRAIN ELEVATORS.

Write for Prices and Discounts.

PHILIP SMITH, Sidney, Ohio.

Do You NEED The Best Feed Grinder on Earth,

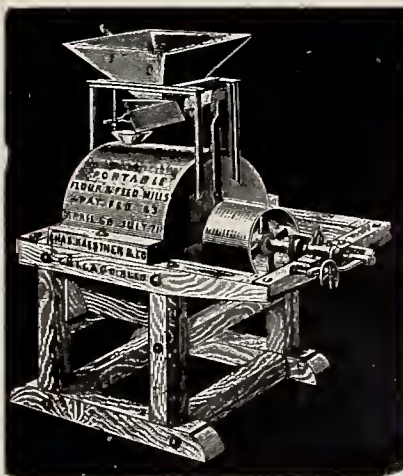
AT PRICES THAT DEFY COMPETITION?

If so, write to

CHAS. KAESTNER & CO.

ENGINES, BOILERS, PUMPS,
POWER MACHINERY,

CHICAGO, ILL.



Akron, Ohio. The American Cereal Co. New York City.
Chicago, Ill. Manufacturers of 55-57 N. Moore St.
Cedar Rapids, Ia. OATMEALS, 501 Cham. Commerce.
Flour and Cereal Products. Philadelphia, Pa.,
5 S. Front St.

CHICAGO, ILL., August 1, 1895.

MESSRS. CHARLES KAESTNER & CO.
Gentlemen:—Yours of the 30th received, and in reply would say that we have been using the Kaestner Mill for the past fifteen years. We think they are the best mill in the market. We have twelve of them in use at present. Yours truly,

THE AMERICAN CEREAL CO.,
GEORGE STUART, Supt.

THE SMITH PNEUMATIC TRANSFER AND STEEL STORAGE SYSTEM.

Now in Successful Operation at Toledo, Ohio.

This is an entirely new and complete system for handling, treating and storing grain, seeds, millstuff, coal, sand, gravel, salt and other subdivided substances which can be handled in bulk, and the protection and preservation of cereals, seeds, vegetables, fruits, ensilage and fodder crops, cotton, wool and other fibers, tobacco, provisions and all perishable substances and valuable commodities in absolute safety from fire, water, air, storms, floods, microbes, insects, vermin, animals, thieves, evaporation, fermentation, oxidation or other causes of damage or destruction.

This system has nothing in common with other methods, but is entirely different and distinct, in construction, arrangement and operation, materials used, principles involved, and results obtained, from all others heretofore in use.

It is fully protected by 20 patents already issued, and others pending, in the United States and principal foreign countries.

It was on exhibition at the World's Columbian Exposition of 1893, and was awarded four highest medals and diplomas and received in addition thereto the highest indorsement of the principal officers of the Exposition as well as of the highest authorities in all industries to which it is applicable.

The title to all patents and other rights belonging to this system is vested in The Smith Pneumatic Transfer & Storage Co., and any infringement thereon will receive prompt attention.

The policy of the Company in regard to the introduction of its system is to make such liberal and easy terms with all who desire to use it that there will be no cause for complaint.

Full particulars furnished on application in person or by letter to

The Smith Pneumatic Transfer & Storage Co.

1327 MANHATTAN BUILDING,

315 DEARBORN ST., CHICAGO.

Going to Buy a Scale?

If so, read a few opinions of Prominent Elevator People on the Merits of the Demuth Check Beam.

C. A. PILLSBURY, Prest.

G. W. PORTER, Treas. and Mgr.

K. R. GUTHRIE, Secy

ATLANTIC ELEVATOR COMPANY, Incorporated.

GENERAL GRAIN DEALERS. Elevators on Minneapolis, St. Paul and Sault St. Marie Ry.

J. A. DEMUTH, Esq., Oberlin, O.

MINNEAPOLIS, MINN., May 25, 1893.

DEAR SIR:—Replying to yours of the 22d, would say that we have the Check Beams on twelve (12) scales in our Atlantic "A" elevator, and like them very much. We find them a valuable check on the weighman, and good for reference to check up with. Yours truly,

K. R. GUTHRIE, Secy.

NEW YORK CENTRAL LIGHTERAGE CO.

NEW YORK CENTRAL ELEVATORS.

Gibson L. Douglass, Mgr.

WEST SHORE ELEVATOR.

1 and 3 Beaver Street,

J. A. DEMUTH, Esq.,

NEW YORK, May 26, 1893.

DEAR SIR:—We are using nineteen "Check Beams" on the scales at N. Y. C. & H. R. R. elevator, and sixteen at the West Shore R. R. elevator. Have discovered a number of errors through their use during the past two years, and consider them a good thing. Yours truly,

G. W. PHELON, Supt.

ARMOUR ELEVATOR CO., Rooms 1111 and 1112, 205 La Salle Street.

Elevators on C. M. & St. P. Ry., and C. B. & Q. Ry., Chicago.

Total Capacity 9,000,000 Bushels.

J. A. DEMUTH, 40 Elm Street, Oberlin, Ohio.

CHICAGO, May 26, 1893.

DEAR SIR:—Yours of the 22d inst. in reference to Check Beams in use on our scales. Would say that we have in use 35 of the Check Beams on scales at our elevators, and consider them invaluable for accurate weighing. Yours very truly,

ARMOUR ELEVATOR CO.

PADDOCK, HODGE & COMPANY,
GRAIN MERCHANTS.

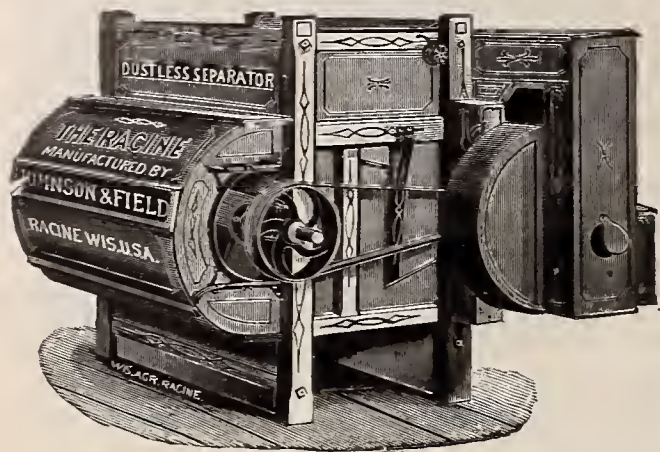
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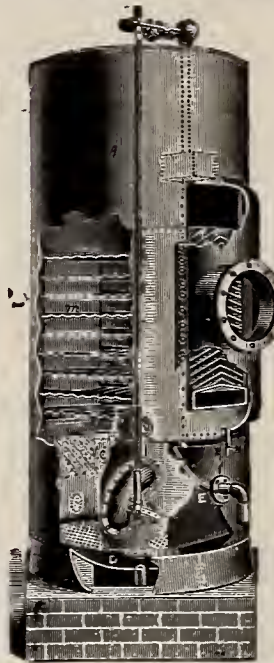


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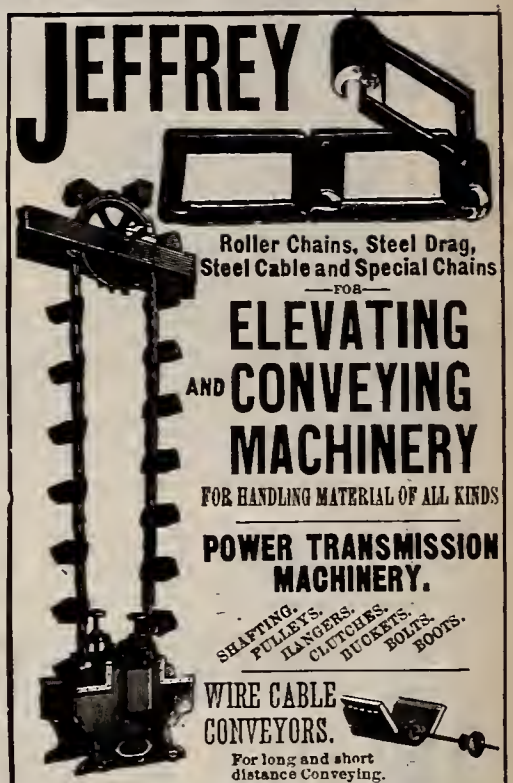
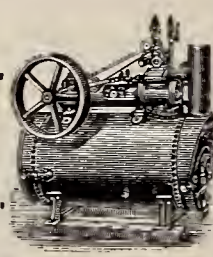
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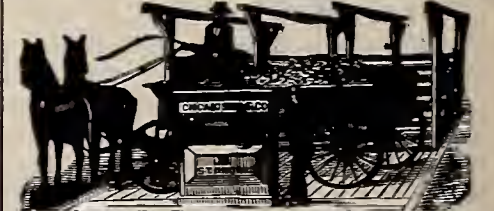
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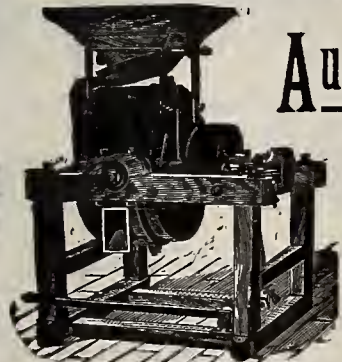


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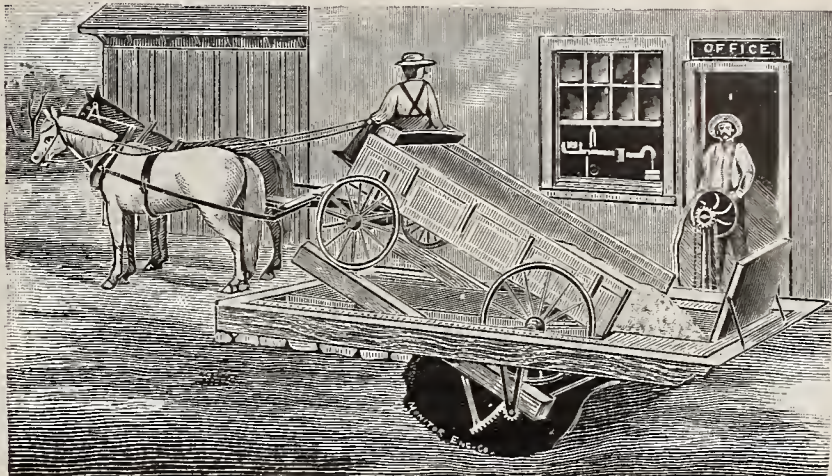
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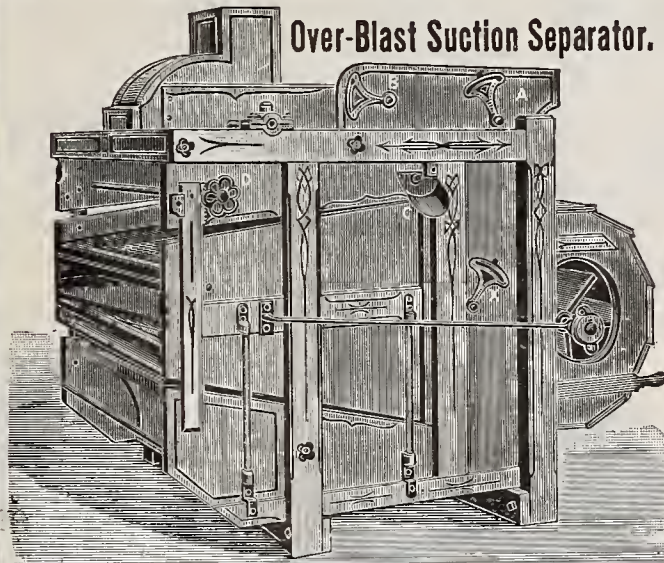
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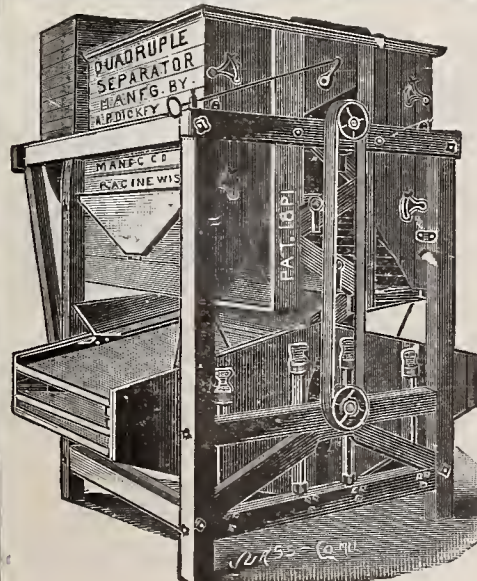


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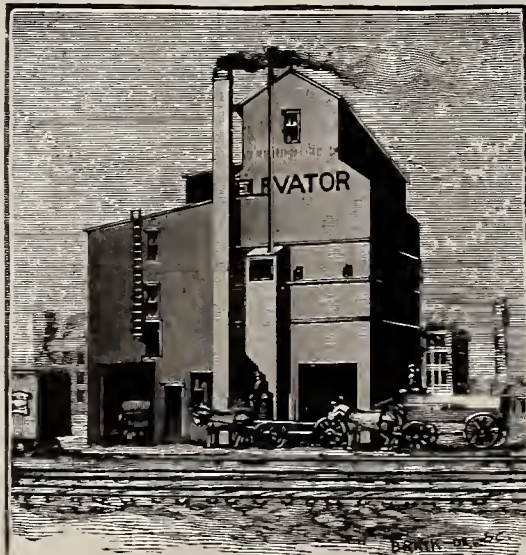
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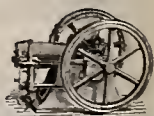
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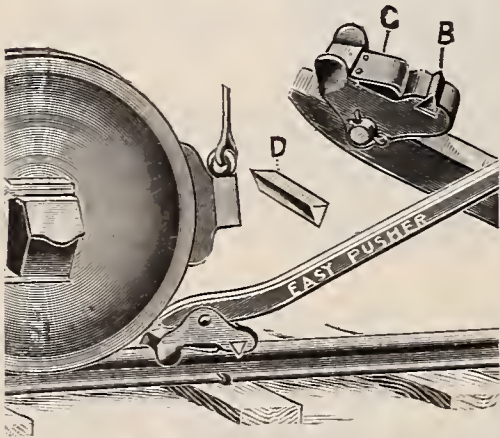
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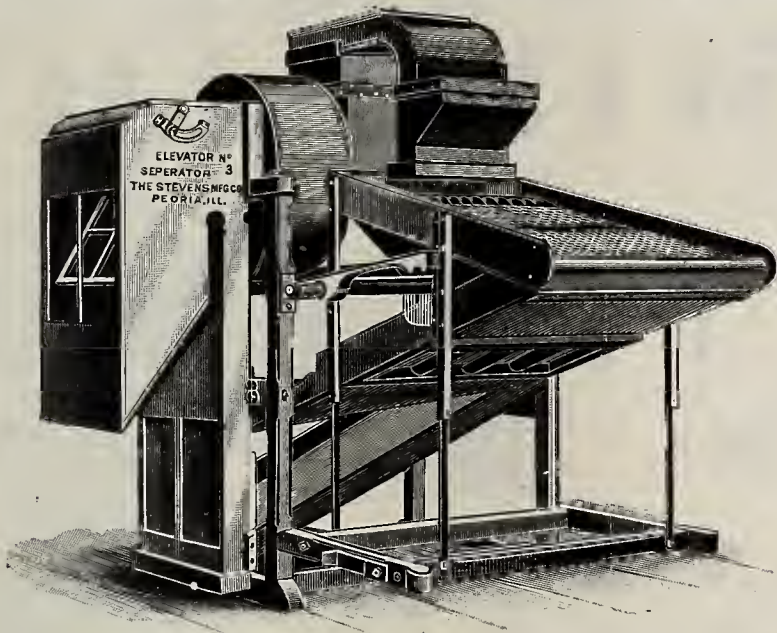


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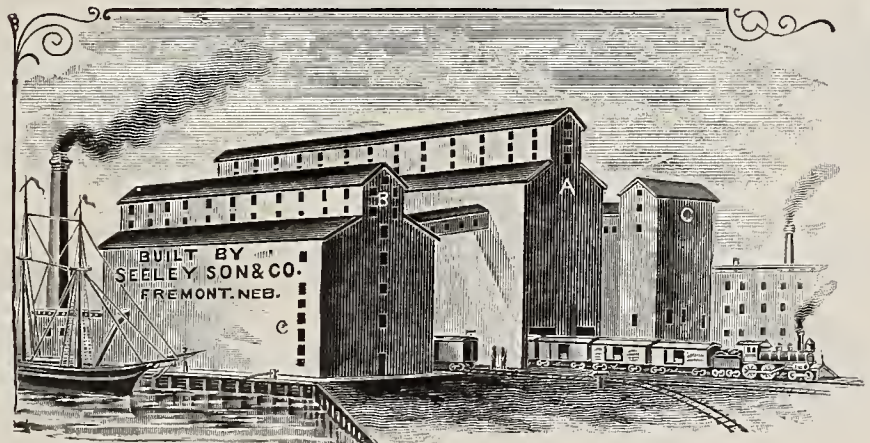
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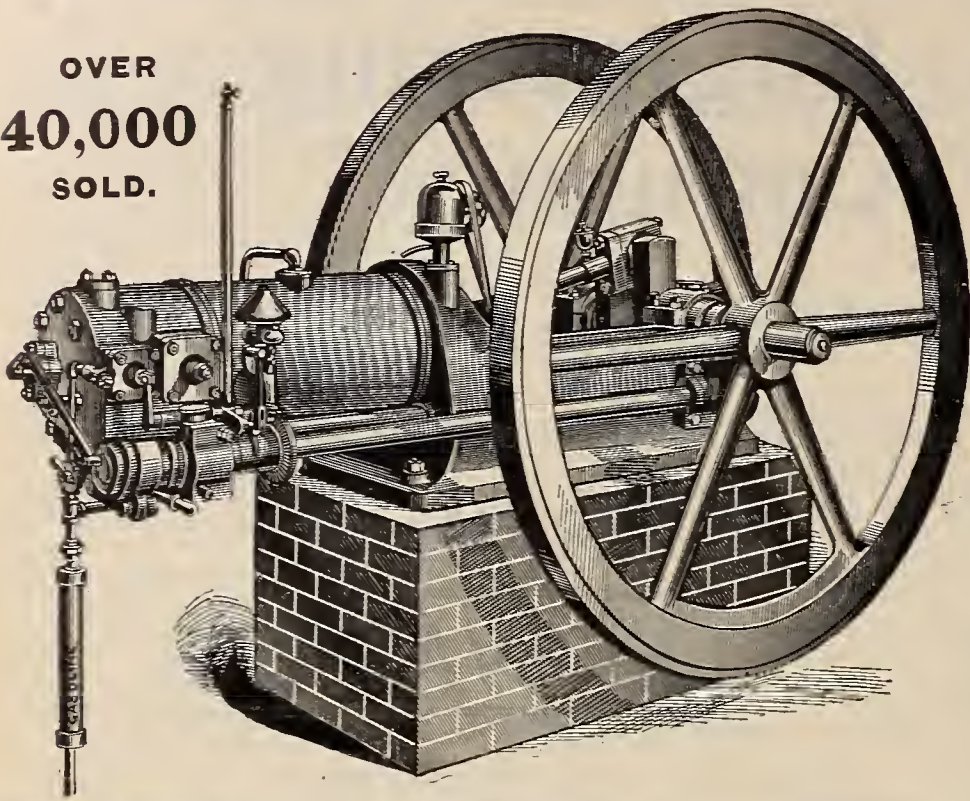
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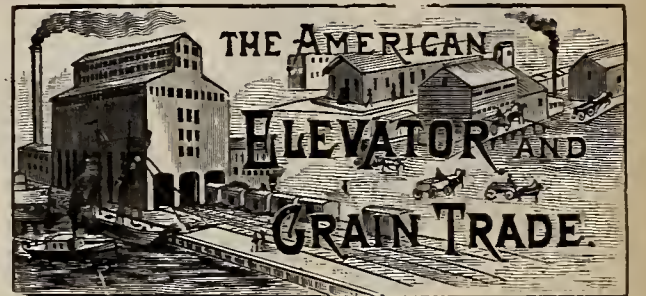
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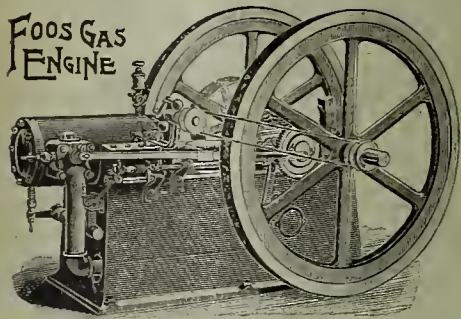
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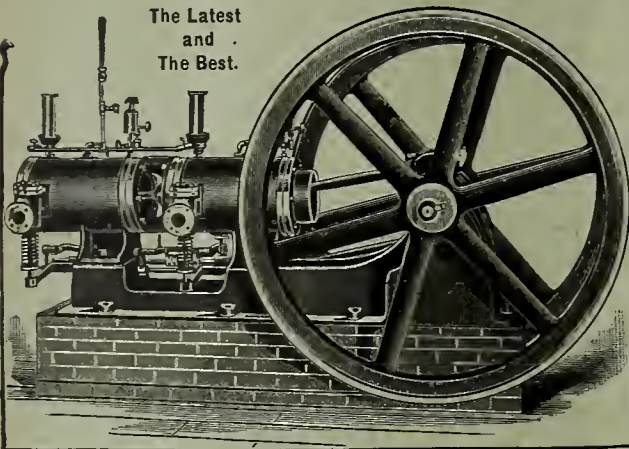
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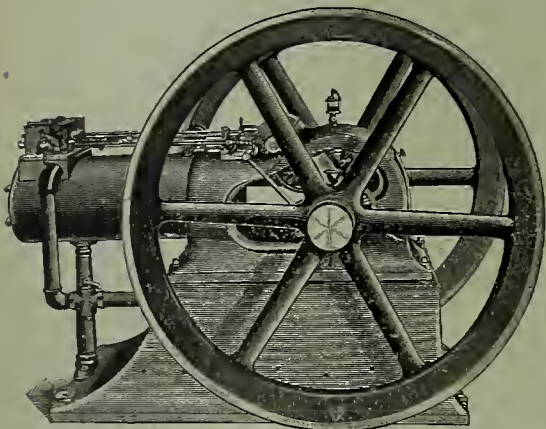
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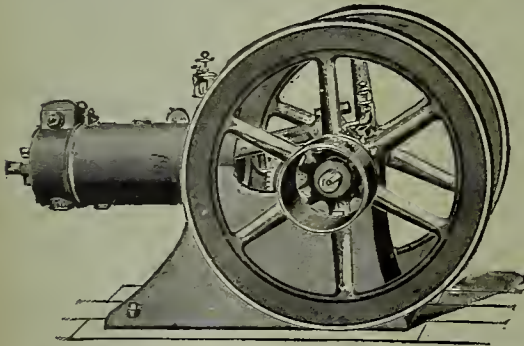


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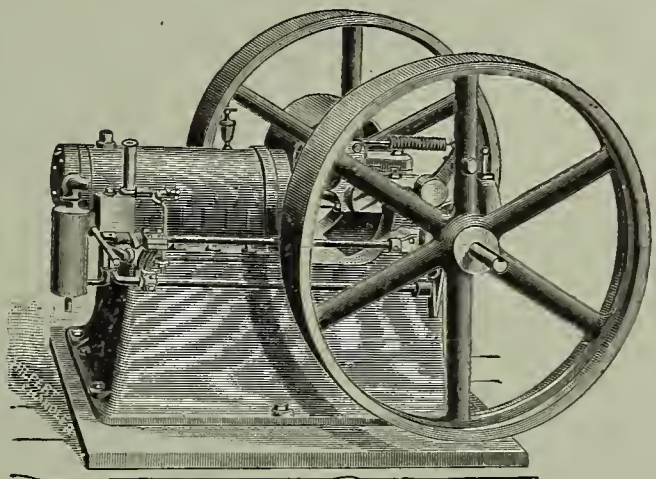
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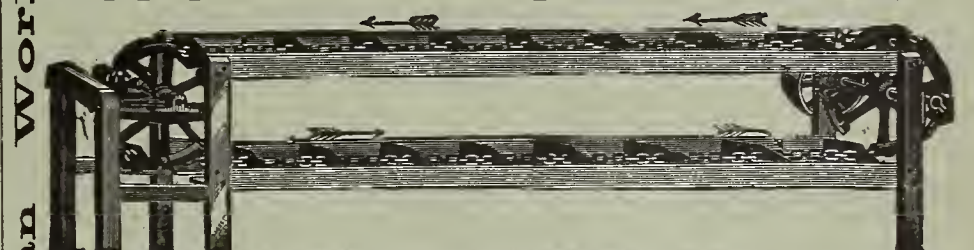
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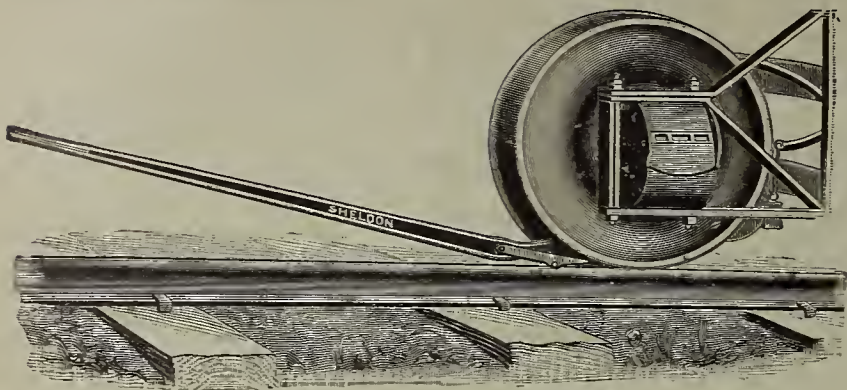
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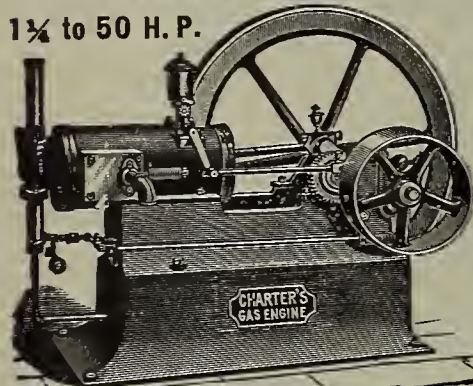
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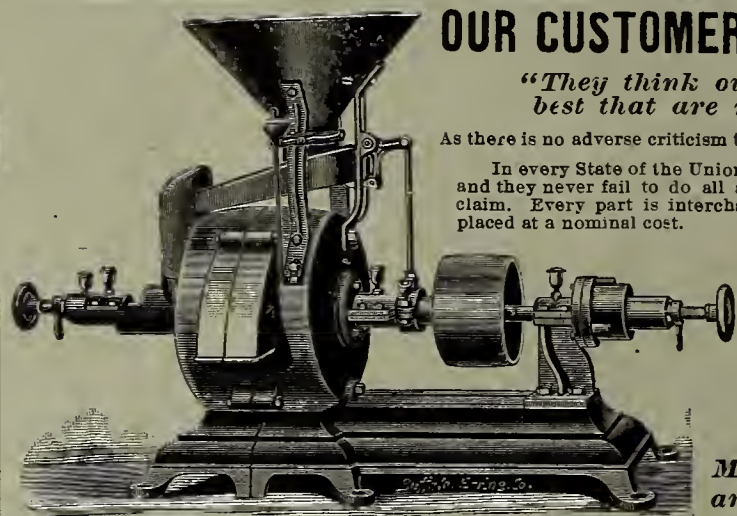
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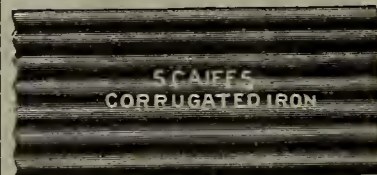
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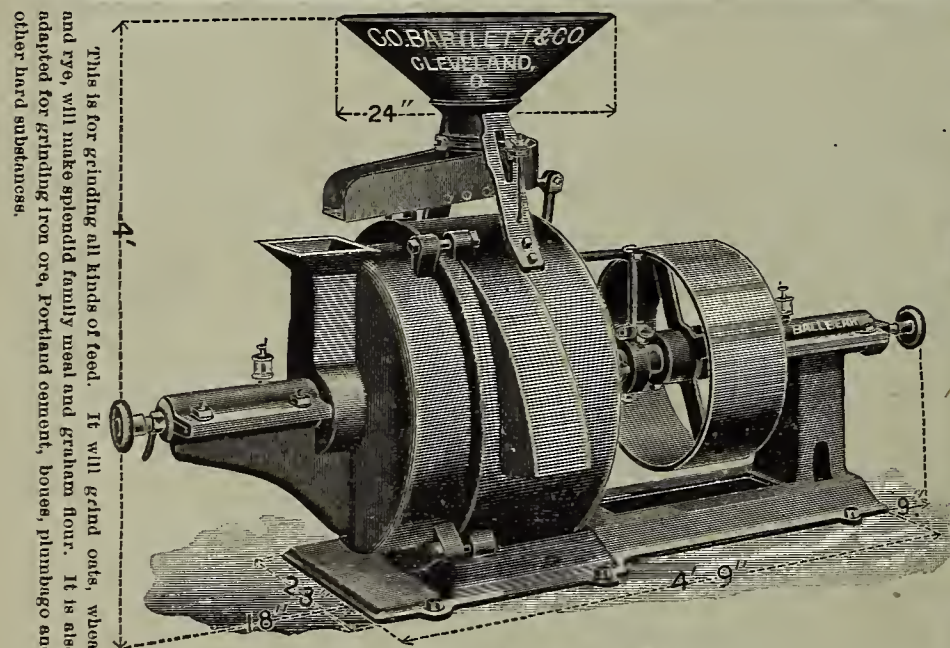
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